

CHISAGO COUNTY COMPREHENSIVE PLAN

CHISAGO COUNTY, MINNESOTA

APPROVED BY THE CHISAGO COUNTY BOARD ON
SEPTEMBER 20, 2017



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INTRODUCTION

Purpose, Process, History, Demographics and Housing Plan

September 2017



Chisago County Comprehensive Plan

2017

Purpose

Chisago County adopted its first Comprehensive Plan in 1970. A successive plan was completed in 1987, prepared in response to increasing growth and development activity in the County and to provide updated data from the 1980 U.S. Census. The goals and policies in the 1987 Plan were basically the same as the 1970 Plan, which was viewed primarily as an update of the previous Plan. The County again updated the Plan in 1995 in recognition of rapid development in many areas of the County.

In the spring of 2003, the County Board of Commissioners authorized an update of the Comprehensive Plan to conduct a critical review of the growth trends and projections for the County. The County completed the extensive update process in 2006 and adopted the updated Comprehensive Plan in February 2007.

In May 2016, the County Board authorized staff and the County Planning Commission to prepare another update to the Comprehensive Plan. The policies of this Plan will provide specific direction about future decisions on physical development and growth while allowing flexibility for the County to adapt to changing conditions. Chisago County continues to be at a critical point in terms of growth and must continue to identify and implement ways in which the growth can best be managed in the future.

The Comprehensive Plan is essential in meeting the challenges of today's demand for the public's expectations for public services in Chisago County. The County cannot haphazardly plan for its future (including housing, transportation, parks and trails, economic development, public safety and resilience) while meeting the needs of the County. With limited financial resources, decreasing land suitable for development and parks, changing trends in land use, recreation, demographics and population and population growth, Chisago County must carefully plan for their future by accommodating the needs of their constituents. The 2016-2026 Comprehensive Plan describes many of the choices Chisago County has made for how it will develop through at least the next ten years. This plan supports a development pattern that, as much as practicable, meets the current needs without environmental, economic and social burdens on future generations. The County is committed to maintaining or enhancing economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend.

The 2016-2026 Comprehensive Plan is an official document adopted by the County Board as the primary policy guide for decisions about the physical development of the County. The Plan sets broad policies and strategies to direct the future growth and development in the areas of land use, transportation, parks and trails, housing, natural resources, historic and cultural resources and public facilities. The Comprehensive Plan is the legal basis for the County-adoption of land use controls.

Chisago County has authority to plan under Minnesota Statutes 394.21-394.37. The County is governed by an elected Board of Commissioners, consisting of five members.

The County Administrator undertakes many of the administrative responsibilities on behalf of the County Board. The Planning Commission, which consists of seven members, advises the Board about planning and zoning activities within the County.

There are ten cities and nine townships in Chisago County. The County land use planning authority includes all of the unincorporated areas in the County, except Lent Township, which has adopted its own Comprehensive Plan and Land Use Regulations. Participation by townships is a critical part of the planning process, since establishing a sound direction for future development in the townships is the primary purpose of this Plan. It also is the intent of the County Board to implement a Comprehensive Plan that reflects the values and goals of the majority of residents of the County.

The Comprehensive Plan is the primary land use vision and policy document intending to guide land use and development decisions of Chisago County. The Plan also is used to ensure consistency in the development of infrastructure and resource planning. This plan provides a framework for how the County and its citizens will guide growth, land uses and development in the County over the next twenty to thirty years. The Comprehensive Plan provides citizens and others with a certain amount of predictability about how development may occur in Chisago County. It is the intent of the Chisago County Board of Commissioners that this Plan be viewed as the primary growth management tool for the County. This Comprehensive Plan is intended to be flexible so it can respond to changing conditions, yet static enough so long-term land use and related policies are consistent and maintained and so careless and ad hoc decision making is avoided.

There are several important questions, trends, issues and desired outcomes that the Comprehensive Plan process has explored. These will help define Chisago County in the future and included: What will be the population of Chisago County in 2020, 2030 and 2040? How fast will the population grow or decline in the future? Will the growth or decline be uniform across the County or will changes be focused in certain locations? What are and will be household characteristics and size? What other demographic changes and trends will the County experience? What will the impacts be of population changes on the County's economy? On housing? On land use? On employers and employment conditions? On local governments and the services they provide? The narrative for each of the elements of the Comprehensive Plan should help to establish a context for addressing these and many other important questions facing the future of Chisago County; and the goal and policy statements of each element should provide guidance for directing the future of Chisago County.

In considering planning trends and the issues facing the region and Chisago County in 2017 and beyond, several desired goals and outcomes have been identified that will help define Chisago County in the future. The overall goals are described later in this chapter and desired outcomes are stewardship, prosperity, equity, livability and sustainability. Within this plan update there is background information, explanations and points of action for each of the goals, themes and five desired outcomes. The

County should pursue plans, policies and projects that balance most, if not all of the overall goals and all five of the outcomes, with the objective of creating positive change.

2003 – 2007 Plan Update Process

A three-phase process was established to update the comprehensive plan in 2003 - 2007. Throughout each phase citizen input was gathered to aid in directing the content of the Plan. A total of nine meetings were conducted throughout the three phases.

The following phases were designed for this process:

- Phase I: Issue Identification, Background Research and Mapping
- Phase II: Development of Plan Goals & Policies, Review of Alternatives, & Land Use Conceptualization
- Phase III: Plan Refinement and Adoption of Revised Plan

Phase I of the process (which took place from March 2003 to August 2003) consisted of preliminary meetings with each of the townships, a joint meeting with municipalities in the County, and meetings with other key players and organizations; such as the County's Economic Development Authority and various Lake Associations. For general public input on issues and opportunities of Chisago County, four "Planning Areas" were established throughout the County based on proximity and similar issues of concern. These Planning Areas were used to conduct public input meetings during Phase I to collect information from citizens on the Assets & Opportunities and the Threats & Challenges facing the County. Over 230 people attended the Phase I Public Input meetings.

In addition, during Phase I, a Steering Committee of 25 people representing various groups, agencies and opinions was appointed by the Board of Commissioners. This citizen based Steering Committee was established to act as a "sounding board" to give County staff direction and feedback on revisions to issues and policies outlined in the draft Comprehensive Plan. In addition, meetings were held with each township and a meeting with all the municipalities took place.

Phase II of the process took place from September 2003 to September 2004. During this phase the steering committee discussed issues, and goals and policies related to the following elements: natural resources, cultural resources, recreation and open space, agriculture, transportation, infrastructure, economic development, intergovernmental coordination and land use/growth management. A series of Public Open Houses, in which over 80 people attended, were conducted in May and June 2004 to display the information gathered to date and to receive comments and suggestions from the general public. Again, meetings were held with all municipalities and with various townships.

In addition, during this time frame, the County Board authorized a full transportation plan to be incorporated into the overall Comprehensive Plan. This transportation plan

component was led by the Public Works department with the assistance of Bonestroo, Rosene, Anderlik and Associates. The process for the Transportation plan included a Technical Advisory Committee in which each city and township was provided an opportunity to have a representative on the committee. The full transportation plan will be incorporated into this Comprehensive Plan.

Phase III of the process took place from October 2004 – November 2006. The plan was further revised based on public input and the final draft presented to the public, Planning Commission and County Board as follows:

- Meet with Township Officers Association in October, 2006
- Host three Township Public Input meetings in November, 2006 (and invite Cities to these meetings as well):
 - Shafer, Amador, Sunrise
 - Franconia, Chisago Lakes, Lent
 - Nessel, Rushseba, Fish Lake
 - (Wyoming Twp is not subject to Chisago County zoning authority.)
- Planning Commission consideration and of the document and recommendation to the County Board in December, 2006
- County Board holds public hearing and adopts Comprehensive Plan in December 2006 contingent upon review and comments by other jurisdictions
- Send to other jurisdictions for comment in January 2007 (DNR, DOT, SWCD, local government units, etc.)
- County Board adopts final Comprehensive Plan in February, 2007
- Begin work on revising Zoning Ordinance in March, 2007

2016 – 2017 Comprehensive Plan Update Process

In the spring of 2016, County staff and the Planning Commission identified the need to update the County's Comprehensive Plan, including adding goals, desired outcomes, references to several important recent County planning activities and studies and updating demographic information. Recent County-wide planning studies include an update to County Local Water Management Plan (2013), an update to the County Transportation Plan (2014), an update to the County Comprehensive Parks and Plan (2016) and the adoption of Master Plans for the Swedish Immigrant and Sunrise Prairie Regional Trails in 2015.

On May 18, 2016, the Chisago County Board authorized County staff and the County Planning Commission to update the Comprehensive Plan. The update process will include several meetings with the Planning Commission, input from the County's Environmental Services staff and other County departments and research about the latest trends in planning for the County to consider as part of the plan update.

2016-2017 Plan Update Public Involvement Process

The 2016-2107 Plan update included a public involvement process. The County expects to have several meetings with the County Planning Commission, possibly open houses with the townships and public hearings with the Planning Commission and County Board. These steps and actions evolved as staff and Planning Commission proceed with the plan update.

Desired Goals and Outcomes for the 2016 – 2017 Comprehensive Plan Update

In considering planning trends and the issues facing the region and Chisago County, staff and the Planning Commission identified several possible desired overall goals and outcomes that will help define Chisago County in the future. The overall goals are:

- Encouragement of neighborhood designs that support a range of transportation choices.
- Protection of natural areas, including wetlands, wildlife habitats, lakes, woodlands, open spaces and groundwater resources.
- Protection of economically productive areas, including farmland and forests.
- Encouragement of land uses, densities and regulations that promote efficient development patterns and relatively low governmental and utility costs.
- Preservation of cultural, historic and archaeological sites.
- Encouragement of coordination and cooperation among nearby units of government.
- Promoting the expansion or stabilization of the current economic base and the creation of a range of employment opportunities and the regional and local levels.
- Planning and development of land uses that create or preserve varied and unique urban, suburban and rural communities.

The desired outcomes are stewardship, prosperity, equity, livability and sustainability. These five outcomes reinforce and support one another to produce greater benefits than any single outcome alone.

For example:

- Stewardship leads to decisions that advance prosperity, equity, livability and sustainability.
- Prosperity provides more resources to support stewardship, equity, livability and sustainability.
- Equity is crucial in creating greater prosperity and livability in the County.

Plans, policies and projects that balance the overall goals and all five outcomes will create positive change. Readers and users of this Comprehensive Plan update will find information, goals and policies throughout this document to help guide and implement each outcome. The County will make tough decisions at the intersections of these outcomes, weighing the benefits and costs of their options against the desired outcomes. The best chance for achieving positive results toward the desired goals and outcomes requires integrated approaches by the County, the cities, the townships and other local governments in Chisago County to advance a vision of a prosperous, equitable and livable County for today and for generations to come.

History

The area now known as Chisago County was derived by early settlers from the Indian word Ki-Chi-Saga which means “fair and lovely waters”. In the early 1800s, the area was a vast area of forests, lakes, wetlands, and prairies. The Chippewa people were the primary residents. However, in accordance with an 1837 treaty, the Chippewa moved out of the area and an influx of European-American settlers arrived. Chisago County was organized in 1851. Logging became the key industry in the area. Sawmills developed in Taylors Falls, Sunrise, and Kost, but by 1914, most of the forests had been cleared and the logging industry declined. Agriculture then became the dominant industry.

Today, agriculture is still an important land use in the county, but the county is rapidly changing. According to the County Assessor’s Office, there were 106,546 acres of land in the County (about 37 percent) used for agricultural purposes in 2016. Chisago County is one of the fastest growing non-metropolitan counties in Minnesota, in part, because of its proximity and accessibility to the Minneapolis/Saint Paul metropolitan area and, in part, because of the attraction of its abundant natural amenities. While much has changed over the years, Chisago County is still known for its natural amenities – its rivers, lakes, wetlands, open spaces and forests. One goal of this Comprehensive Plan is to help guide the County in preserving and enhancing the natural amenities that have historically been important, and will continue to be important, to the residents of the county.

Sieur duLuth, a French Canadian, was the first known white man to enter Chisago County in his travels down the St. Croix River in 1679. During the next one hundred years the French and English established trading posts at what are now known as Taylors Falls and Sunrise.

The 1837 treaty in which the Ojibway and Dakota Indians ceded all lands between the St. Croix and Mississippi Rivers opened the Chisago County area to settlement by the white man. In 1837 as well, a man named Jesse Taylor arrived in the location that would later bear his name, Taylors Falls. The first steamboats arrived at Taylors Falls a year later in 1838.

During the remaining decades of the 20th century, logging became the key industry in the Chisago County area. There were mills in Taylors Falls, Sunrise and Kost. Transporting the logs down the St. Croix River to the mills caused navigational difficulty with the steamboats coming up river, as well as causing erosion to the banks of the rivers and numerous logjams. Nevers Dam, the largest wooden dam ever built, began operation in 1890 and controlled the flow of logs down the river until 1912.

In 1848, the Chisago Lakes Area (Chisago City, Lindstrom and Center City) was surveyed for the federal government. The County was officially founded in 1851, and Taylors Falls became the first county seat. The first mail delivery to Taylors Falls took place in 1851.

In 1853, the road from Stillwater to Taylors Falls was completed, and a stage run opened. The first bridge to cross the St. Croix River was completed at Taylors Falls in 1856. Ferryboats crossed the St. Croix River at Sunrise and Rush City. In 1868, the military road, which traversed the entire County from north to south, was opened. Railroads followed as an important method of transportation. The St. Paul-Duluth Railroad, which crossed the County from north to south, was completed in 1870.

In 1865, the County seat was moved from Taylors Falls to Chisago City. It was later moved to Center City in 1875, and a courthouse was built. Although the County seat remains in Center City, two subsequent votes to move it have failed – in 1899 to move to North Branch, and in 1989 to move to Branch.

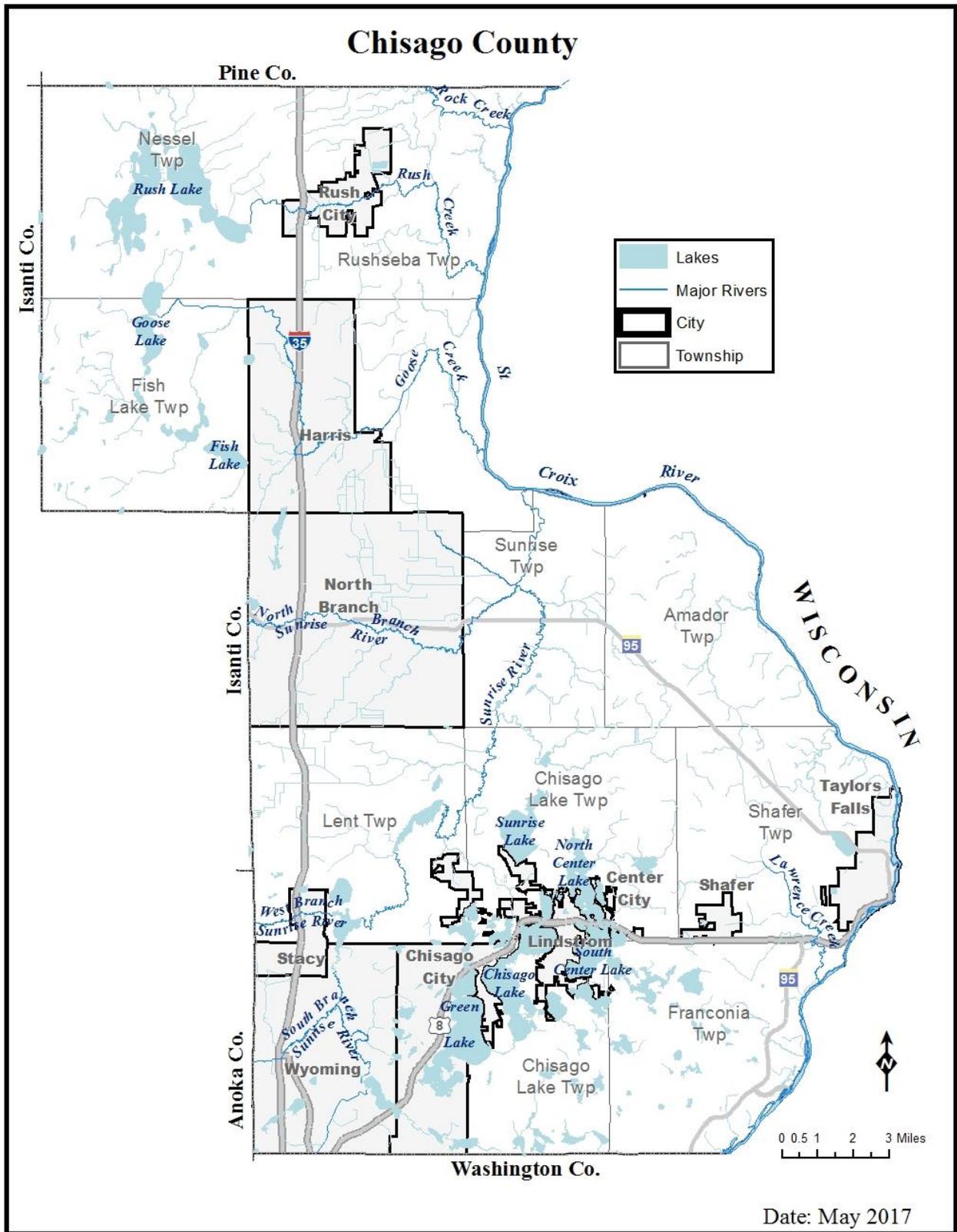
Although there were at one time 39 school districts in the County, today there are only seven. Agriculture was, and still is to a large degree, a prime industry in the County, with livestock, row crops, vegetables and turf being the primary activities. One of the largest potato equipment manufacturers of its time, the Splittstoesser Company, was based in North Branch. Many creameries were opened in the County to serve the dairy herds. Today, beef cattle have replaced many of the dairy herds. By 2007, the State of Minnesota reported that the largest employing industries in the County were health care and social assistance, manufacturing, retail trade, educational services, food services and public administration.

The Swedes and other Scandinavian ethnic groups are the most well-known settlers in Chisago County; however, the Germans, Irish, French, English and other groups helped to develop the County as well.

Regional Context

Chisago County is in east-central Minnesota on the Wisconsin border. It is roughly 35 miles north of the Minneapolis/Saint Paul metropolitan area, about 115 miles south of Duluth and about 58 miles east of St. Cloud. The county is well served and accessed by several major highways. Interstate Highway 35 runs north-south through the western portion of the county, US Highway 8 runs east-west through the southern portion of the county and Minnesota State Highway 95 runs east-west through the center of the county. Most of the existing development in the county is along these highway corridors and is within one-hour commute (or a day trip) of the metropolitan area.

The population of the county is expected to grow, in part, because of the proximity of the county to the metropolitan area. The county attracts residents who work in the metropolitan area, but who seek the quality of life that the county offers. The county also attracts tourists (many of whom are from the metropolitan area) who visit the county to enjoy its scenery and recreation opportunities. In particular, Wild River State Park, Interstate State Park, the Saint Croix River, Chingwatana State Forest, Carlos Avery Wildlife Management Area, and the 40 lakes attract many recreation enthusiasts to the county. Although Chisago County is a rural county, its proximity to the metropolitan area and its natural amenities contribute to its significance in the region.



Demographic Analysis

Not only is it important to know how many people live in Chisago County, but it is also important to know key characteristics of the population and the households in the county as well. For example, their age, household status, employment status, and where they live in the county. It is also important to look at future projections of population and households to determine what impacts may occur. This section briefly describes population and household characteristics of the county.

Historical Population Patterns

There are three significant periods related to population growth in Chisago County: 1) 1850 to 1900, 2) 1900 to 1960, and 3) 1970 to the present. From 1850 to 1900, the population of the County grew 87%. This tremendous growth relates to an influx of European-American settlers and to the growth of the logging industry in the area.

By the early 1900s, most of the forests in the county had been cleared, sawmills began to close, and lumberjacks left the county for other employment opportunities. Also, farming practices significantly changed during the 1900s. Advances in farm machinery required fewer people to farm larger areas. As a result, from 1900 to 1960, the population of Chisago County declined by 1%.

From 1970 to 2000, the population of Chisago County increased by 135%. Several factors contributed to this growth. Improvements in the transportation system allowed cities along Interstate Highway 35 and U.S. Highway 8 to have easy access to a greater area. Consequently, businesses and industries prospered in these areas. In addition, people seeking a rural lifestyle moved to the county from the Twin Cities metropolitan area. Many of these people were attracted to the natural and rural amenities of the county. Due to the relatively easy commute to the Twin Cities area, many of these people were able to live in the county, but work in the metropolitan area. In essence, the natural resources that attracted European-American settlers to the county in the 1800s also attracted residents in the 1960s and continue to attract residents and visitors today.

The U.S. Census shows that in the year 2000, Chisago County had a population of 41,101. This is an increase of 35% from the 1990 population of 30,521 and an increase of 60% from the 1980 population of 25,717 as shown in the table below. By 2010, the Census showed 53,887 residents in Chisago County – a 79 percent increase over the 1990 population of 30,151. The US Census estimated the County's population at 54,293 in 2015. In recent years, Chisago County has been one of the fastest growing counties in the State. For example, according to the State Demographic Center, Chisago County was the fifth-fastest growing county in the state for the years 2000 to 2014 (with a population increase of 12,924 – a population increase of 31.4 percent). Most of this growth has occurred in the cities along Interstate 35 and along Highway 8.

Chisago County Historical Population

1970	1980	1990	2000	2010	% Change 1970-1980	% Change 1980-1990	% Change 1990-2000	% Change 1970-2000
17,492	25,717	30,521	41,101	53,887	47	19	35	135

Source: U.S. Census 1970, 1980, 1990, 2000 & 2010

Population Projections

In recent years, Chisago County was one of the fastest growing non-metropolitan area counties in the State. It is projected by the State Demographer that between the years 2000 – 2030, Chisago County will be the 4th fastest growing county in the State. The County’s proximity and accessibility to the Twin Cities Metropolitan Area and its natural amenities are two factors that are greatly influencing this growth. There are expected to be increased pressures for more growth in the County in the next 10-20 years, as people continue to view larger lots in the rural areas as an attractive alternative to suburban development.

The State’s population projections through 2040 show Chisago County as the fourth fastest growing county in the state with Chisago County projections showing a population of 63,671 in 2020 (a 18.2% increase from 2010-2020), a population of 68,071 in 2030 (a 26.3% increase from the 2010 Census population) and a population of 70,610 in 2040 (a 31% increase from 2010-2040).

Chisago County Population - Estimations and Projections

2010 (Actual)	2016 (Estimated)	2020	2030	2040	% Change 2010-2020	% Change 2010-2030	% Change 2010- 2040	% Change 2000-2030
53,887	54,766	63,671	68,071	70,610	18.2	26.3	31	69

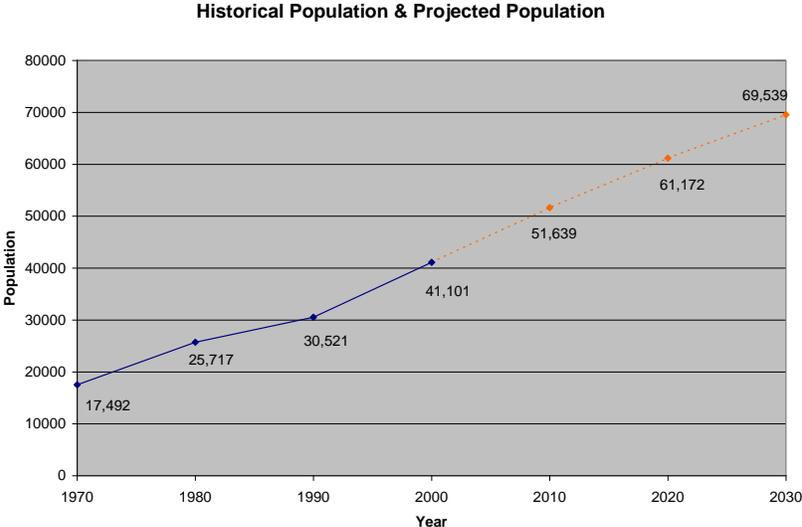
Sources: US Census and Minnesota State Demographic Center

Before the 2000 U.S. Census data was released, the State Demographic Office estimated the population of Chisago County was 39,860 in the year 2000. As discussed above, the U.S. Census shows that the 2000 population was actually 41,101 the 2010 population for Chisago County was 53,887 and they estimated the County’s population at 54,293 in 2015. Consequently, the State’s population estimate for 2000 was conservative and it follows that its population projections are likely conservative. Therefore, the following population projections from the State are conservative and should likely be adjusted upward.

If it is assumed that the population growth rate will be the same between the years 2000 and 2020 as it was between 1980 and 2000, then using a 60% increase per 20-year period, it could be assumed that the population of Chisago County would be roughly 68,500 in the year 2020. Or using a 30% increase per 10-year period (90% in 30

years), it could be assumed the population of Chisago County will be roughly 78,092 in 2030. (Note: The increase from 1970 to 2000 was actually over 135%).

This growth may affect the County in several ways: 1) pressure to develop in the rural and natural areas will likely increase, 2) infrastructure needs (new construction and maintenance) will likely increase significantly, 3) pressure to provide more urban amenities will likely increase and 4) the need for additional recreation opportunities and related services will likely increase.



Age Composition

The State Demographic Office’s projections show the population across the state will be older, largely to the continued aging of the baby boom generation. The projections also show a more modest growth in the younger age groups. The tables below show the age composition for Chisago County. As indicated by the data in the tables, the greatest increase in percentages from 2015 to 2030 is projected by the State to be in the 65 to 74 age group.

2015 Age Composition

Age	Number	Percent
Under 5 years	3,466	5.7
5 to 9 years	3,505	5.8
10 to 14 years	4,534	7.5
15 to 19 years	4,728	7.8
20 to 24 years	3,331	5.5
25 to 34 years	6842	11.3
35 to 44 years	7,910	13.1
45 to 54 years	9,899	16.4
55 to 59 years	4,352	7.1
60 to 64 years	3,423	5.7
65 to 74 years	4,987	8.2
75 to 84 years	2,691	4.4
85 yrs and over	850	1.4

Source: MN State Demographer

2030 Age Composition

Age	Number	Percent
Under 5 years	4,016	5.9
5 to 9 years	3,812	5.6
10 to 14 years	3,561	5.2
15 to 19 years	3936	5.8
20 to 24 years	3,186	4.9
25 to 34 years	8,775	12.9
35 to 44 years	7,361	10.8
45 to 54 years	7,511	11.3
55 to 59 years	4,288	6.3
60 to 64 years	4,541	6.8
65 to 74 years	9,403	13.8
75 to 84 years	6,089	8.9
85 yrs and over	1,592	2.3

Source: MN State Demographer

Chisago County Population Overview

Year	Total County Population	65+ County Population	County Percent 65+	State Percent 65+
2000	41,101	4,047	9.85	12.08
2010	53,887	6,247	11.6	12.88
2016	54,766	7,546	13.9	14.0
2020	63,671	10,882	17.1	15.94
2030	68,071	17,084	25.1	20.63
2040	70,610	20,471	29.0	22.10

Sources: US Census and Minnesota State Demographer's Office

Demographic Considerations for Long-Range and Strategic Planning

The Minnesota State Demographic Center published a report in March 2016 titled “Demographic Considerations for Long-Range and Strategic Planning.” This report outlined demographic trends and several issues and considerations for policy makers to consider as part of budgeting and long-term planning for the State. Many of the topics and considerations in this report are applicable to Chisago County as follows:

Demographic trends over the next several decades will exert unique pressures that will transform the landscape for local, county and state governments. This report identifies three major demographic trends for policy makers and leaders to consider as they continue their work in strategic and long-range planning. Those three trends –

- Population aging,
- Shifts in the labor force, and
- Growing racial and ethnic diversity

will change both the work and the workforce in Minnesota.

The demographic shifts will settle in over the next several decades with the resulting compositional differences in the State’s society and workforce will be long lasting. In particular, Minnesota’s population and workforce will be older for decades to come and more racially and ethnically diverse.

Population Aging

In the coming decades, Minnesota’s population and its workforce will become increasingly older and the as a result the labor force will dramatically slow its growth. Minnesota is now on the cusp of an era in which its older adult population (ages 65 plus) will surge to a figure that is several times larger than what Minnesota experienced just half a century ago. The growth in the older adult population is due to the large Baby Boomer generation entering the 65 plus age group as well as lengthening life spans. While the transition of the Baby Boomers into their later years will be a one-time event, it will usher in a more sustained shift from a younger to an older age structure. Barring major unforeseen events, Minnesota’s (and Chisago County’s) older age structure will remain for the duration of the 21st Century.

For example, from 1980 through 2010, the 65+ group in Minnesota consistently accounted for 12-13 percent of the total population. However, this share in Minnesota is expected to rise to 17 percent in 2020 and to 21 percent by 2030. In other words, one in five Minnesotan will be an older adult by 2030. For Chisago County, the State estimates that 25.1 percent of the population (1 in 4) in 2030 will be aged 65 plus. This percentage (25.1) of the county population as seniors is larger than is projected for the State (21 percent) as a whole. A population that is considerably older on balance will have implications for demands on public programs and services, urban planning,

housing stock, health care, economic purchasing programs and a range of other areas relevant to State (and County) leaders and policy makers.

An increasing number and share of users of State (and County) services and programs will be older adults. Public service providers will need to consider not only what service are provided, but also how they are delivered. For example, customers and clients will expect government agencies to attentive to font size on websites and print forms, to accessibility issues and other strategies to better serve older adults. Soliciting feedback and program design suggestions from older adult users can help to identify areas in need of improvement or modification.

The public programs that serve older Minnesotans are certain to experience direct impacts of population aging. Older adults' enrollment in long-term care service under Medical Assistance (MA, Minnesota's Medicaid program for those with low incomes and/or disabilities) will swell considerably as the Baby Boomers enter the later years of their lives, during which many will require long-term care. While family and friends provide the majority of long-term care when illness or disability is more than they can manage or an individual does not have a personal care network that is nearby, individuals look to community-based programs, home care agencies, assisted living facilities and nursing homes to provide long-term care services. Minnesotans become eligible for MA's long-term care services only if they have very limited income and assets, or after spending down most of their resources paying for health and long-term care.

Population aging is not just a short-term phenomenon to weathered; rather, there is a shift toward an older society that will be the reality for Minnesota well into the foreseeable future. Thus the demographically driven budget pressures that will play out over the next 15 to 30 years will require budgeting changes that realign with Minnesota's new age structure. By staying attuned to this population-aging phenomenon, policy-makers and program managers will be well to anticipate changes and make adjustments. Examples of anticipated changes include:

- Programs that serve all ages, such as SNAP (Supplemental Nutrition Assistance Program), should anticipate a rising share of its enrollees to be older adults as the population distribution shifts. (This is a county administered, federal program that assists low-income people to buy food and better meet their nutritional needs).
- Greater attention will need to be paid to the changing preferences and needs of individuals as they age in the broad spheres of housing and transportation options (including the availability of public transit).
- Proper staffing of the medical and caregiving workforce will be a priority, as more older adults will be managing chronic illnesses and/or disabilities that require caregiver assistance, including dementia.

While there are many areas that require careful thinking and planning for the impacts of an aging population, it also is understood that older adults are vital assets to their families and communities. As much as possible, older adults should be enlisted to help shape the design of aging service at the state and local levels. Furthermore, Minnesota's older adults exhibit very high level of volunteerism, and state and local leaders should be aware of this large amount of human capital that may be enlisted to help meet and array of State and local needs. Older adults may be willing to mentor younger workers, serve on task forces and citizen panels or commissions or otherwise make positive impacts aligned with the State's (and County's) goals.

Goal: Enlist older adults to help with programs and services offered by Chisago County.

Policies:

1. The County will actively enlist older adults to help design services for the aging offered by Chisago County.
2. The County will actively enlist older adults to live, especially summers, in Chisago County.
3. The County will actively encourage older adults to volunteer on task forces, citizen panels and on commissions.
4. The County will encourage older adults to mentor younger workers.

Racial and Ethnic Diversity

It is expected that Asian, Black and Hispanic and multiracial Minnesotans will continue to grow most rapidly in the coming decades. As Minnesota's population grows more diverse in terms of race, ethnicity, culture and language in the decades to come, it is important to emphasize the necessity of continued training in cultural competency and equity work among the State workforce, both as it serves the public and relates to its own members. According to the US Census, 97.2 percent of the population of Chisago County in 2000 was white. In 2010, the percentage of County population that was white shifted to 95.8 percent. It is projected that 94.6 percent of the County population will be white in the year 2020. This would be a 2.6 percent decrease in the percentage of white population (and thus a 2.6 percent increase in the percentage of minority population) in Chisago County for the years 2000 – 2020.

Conclusion

Population aging, workforce changes and growing diversity are three major demographic trends that will shape and transform Minnesota and Chisago County in the coming decades. These trends are fundamentally related to efforts to plan for sustainable, responsible budgets and future State (and County) government and private sector workforce needs. Policymakers and leaders will need to consider these fundamental demographic changes as they conduct strategic and long-term planning. It should be noted that it is not possible to determine how future federal policies, technology, productivity gains, health advances and other developments may change the trajectory of demographic trends and programs. Supervisors and managers across

State and local governments should be aware of these trends and reflect upon how this information may require changes in their respective areas of work as they proceed with their long-range and strategic planning - including the areas of land use, development and transportation systems.

Households

As the baby boom generation continues to age, the number of married couples without children living at home will grow. Another trend related to baby boom aging will be that the number of one-person households headed by a person 65 and older will grow. The number of households in Chisago County will grow faster than population mainly because the population is getting older. As the baby boomers age, more people will be living in small one-person or two-person households instead of in larger families.

The increasing number of households will be accompanied by a shift in household type. The number of married couples with children will not change much, while the number of non-family households and married couples without children will increase rapidly. These changes reflect both the aging of the population and changes in social customs and lifestyles, and they will affect all areas of the state.

As the population ages, the proportion of people in their childbearing and child-rearing years will decline. This is the major reason for the stagnant number of married couples with children. In addition, the projections assume that more of the people who have young children will be single parents or will be in a cohabiting relationship rather than marriage.

The number of single parent families has risen dramatically in recent decades. Projections from the State Demographers Office show this household type will grow, but at a rate slightly below the overall rate of household growth.

The increase in the number of elderly one-person households will continue as one of the effects of the aging Baby Boom generation. Household size will decline because the number of households is projected to grow faster than the number of people. This reflects the aging of the population and the growing prevalence of smaller types of households, such as empty nesters and one-person households.

Number of Households in Chisago County – Actual and Projections

Year	2000	2010	2016	2020	2030	2040
Total	14,454	19,470	20,041	23,560	27,620	28,244

Sources: US Census: 2000 and 2010 and Minnesota State Demographer: 2016, 2020, 2030 and 2040

The total number of households in Chisago County increased approximately 33% from 2000 to 2010 (14,454 to 19,470) and is projected to increase 42% from 2010 to 2030 (19,470 to 27,620).

The majority of households in the county in 2010 (61 percent) involved married couples with children. However, in the future a larger percentage of married couples will not have children living with them. There also will be more households with children that will have only one parent in the household. More households will involve a single person living alone or sharing a dwelling unit with other single, unrelated people. Given the trend for more single person households and smaller family sizes, it follows that household size will also decrease. The State Demographer's Office is estimating that the people per household in Chisago County will drop from 2.68 in 2010 to 2.64 in 2020 to 2.5 people per household in 2040. Therefore, because the county's population will continue to grow and household size will likely decrease, the County and area cities will need to plan accordingly to allow for development of an adequate amount and variety of housing. This in turn will affect the type and location of parks, trails, and open space in the county. This also means that Chisago County and local communities will need more recreation facilities to better meet the future needs of residents.

Housing Plan

Individual housing preferences vary as each household considers factors such as access to desirable schools, proximity to jobs, the availability of transit and nearby amenities including cultural and religious institutions. People are increasingly choosing where they want to live and then looking for employment. Young creative professionals are highly mobile and can live anywhere they want. They are often choosing or prioritizing high-amenity places (including those with high-speed internet service or access to technology) that have a diverse population, natural beauty, abundant recreation and sufficient walkability that allow them to travel without an automobile and to communicate quickly and easily with clients and friends around the world.

Attracting younger talent through high-quality communities also is an investment in the future market for the housing stock. Many younger families look for more space as they have children and their lifestyle preferences change. As existing residents age out of their homes, the younger residents will be ready to move in. Businesses also place a high value on livability. Whether a large company seeking a location for an office or a talented entrepreneur looking to grow an innovative business, decision-makers want to know their employees can get to work and are happy living in the area.

Growing demographic groups that also could define new housing needs in Chisago County include:

Seniors – the “Silver Tsunami” of those age 65 and older – will be the fastest growing segment of the County's population. The State Demographers Office estimates that by 2030 there will be 17,084 people (25.1 percent of the population) in that age group (1 in 4 people) in the County and by 2040 the number will grow to 20,471 (29 percent of the county's population). As people age, their housing preferences tend to change. Some seniors choose to move to a condominium. Others want to age in place, close to their places of worship, friends or family members. Across these

locational preferences, most seniors share common interests in less household maintenance, one-level or accessible spaces and easy access to goods and services, especially health care. The County and local communities should study whether there are adequate housing choices, including age-integrated options, available for seniors to stay active, conveniently access goods and services and/or be near friends and family. To better accommodate seniors, the county and cities should consider adding zoning tools and/or change development standards to facilitate housing options to better connect this growing demographic with the locations where they desire to reside.

The Millennial generation, those born in the 1980's and 1990's, is a growing demographic generation and seems to have different lifestyle preferences than previous generations. Millennials tend to favor urban amenities, access to transit and bicycling options and denser and active neighborhoods rather than the auto-oriented subdivisions of their youth. Between stagnant entry-level wages, higher student loan debt and delayed marriage and child rearing, millennials are moving into homeownership at later ages than previous generations. Critical to County's future prosperity will be the availability of places to live that keep and attract these young people to Chisago County. As the millennial generation's living preferences continue to diverge from the parents' generation's, will there be living options available in Chisago County to satisfy their wants and needs, especially as they start to have children?

As Minnesota's economy grows stronger, access to safe and affordable homes builds the foundation for families and for living, working and learning in all communities. For many, renting makes sense. Young people starting out are often saddled with student debt. Seniors may not be able to afford or manage owning a home. Many do not have the savings or credit to qualify for mortgages. Workers relocating for jobs also need rental housing.

Despite recent improvements in the economy, renter incomes are still below 2000 levels in most Minnesota counties. According to the Minnesota Housing Partnership, renter incomes in Chisago County fell 24 percent from the year 2000 to 2014 while rents increased by 14 percent, after adjusting for inflation. They also noted that in 2015 about 15 percent of households in Chisago County were renters and that 85 percent of households in the County own a home.

A large majority of the housing units in Chisago County are single-family homes (approximately 80%). The number of households in the County is expected to rise 24% between the years 2015 and 2030. As of July 1, 2015, the US Census Bureau estimates there are 21,518 housing units in Chisago County. This is an increase of 346 from the 21,172 housing units the Census counted as of April 1, 2010. By 2020, Greater MSP is estimating there will be 22,240 housing units in the County – an increase of 1,068 housing units from 2010. With the projections of steady growth for the future, it is important that Chisago County be well prepared for the increased demands that will be put on the County and its resources.

An Overall Housing Study for Chisago County was prepared for the Chisago County Housing and Redevelopment Authority in September 2000. This study analyzed housing needs and conditions for the County. The multiple goals of the study included:

1. Evaluating the need for additional rental housing in Chisago County.
2. Providing an analysis of the current housing stock and inventory.
3. Determining gaps and unmet needs.
4. Examining future housing trends and predictions that Chisago County can expect to address in the coming years.
5. Providing a summary of existing resources for housing and resource providers.
6. Supplying recommendations for new single-family and multi-family housing.

The study divided the county into seven geographic regions. By reviewing the employment conditions, population characteristics and projections, household characteristics and projections and existing housing, the study then recommended the market need of housing (number and types) in each demographic area. Those recommendations are detailed in the document "Overall Housing Study for Chisago County" published in September 2000.

The housing study is to be considered a part of this Comprehensive Plan but will remain as a separate document. Because this housing study's projections and recommendations were based on a time period up to 2004, the County HRA-EDA will be doing a new housing study for the County in 2017-2018.

In the Spring of 2017, the County HRA-EDA prepared an RFP requesting a Comprehensive Housing Study and Needs Analysis of Chisago County. As noted in the RFP, the results of this study will help decision makers, stakeholders and community members develop a meaningful sense of the housing market, an understanding of key housing issues and identification of new strategies and strategies used elsewhere to address the county's housing needs. The study is to provide a measured assessment of present and future unmet housing demand, focusing on a deeper understanding of short-to-mid-term housing demand (5-15 years).

The goals of the housing study are to address the following questions:

- Is housing adequate in Chisago County to accommodate future growth and jobs in the County? What are the critical gaps and issues of the housing stock?
- What strategies should be used to address these issues and the need to support future economic growth?
- What types of housing will be needed in the short, mid and long-term?
- What types of housing development should be pursued or supported to meet the future demand?
- What programs should Chisago County and its cities provide for the development and/or redevelopment of necessary housing?
- What types of housing demands will likely not be met without subsidy, incentives, innovative programs, etc.?

- What are the specific workforce housing and transitional senior housing needs?

The County HRA-EDA contracted with Maxfield Research and Consulting in June 2017 to conduct the housing study. As they identified in their contract, Maxfield will determine the market potential for developing different types of owned and rented housing in Chisago County through 2030 based on an examination of demographic and employment growth trends and current housing market conditions. They also will provide detailed recommendations (number of units/lots; unit mix and sizes; prices/rents; housing features and amenities, etc.) for the housing types identified as needed in the short-term (2017 to 2022) and long-term (2022 to 2030) would be provided. The HRA-EDA and Maxfield expect to have the housing study completed by the Spring of 2018.

Goal: Improve the livability and increase the housing options for Chisago County's changing demographics (including seniors and millennials) and to attract and maintain a competitive workforce.

Policies:

1. The County will encourage the development and expansion of a wide variety of housing options throughout Chisago County. These will be to serve changing market needs and the increasing diverse population, including housing choices for seniors, low-to-moderate-income households and multigenerational households.
2. The County supports having a variety of housing options in the cities and townships that give people in all life stages and economic means viable choices for safe, stable and affordable homes.
3. The County supports the development of scattered-site, affordable housing - particularly in existing single-family homes in cities and townships.
4. The County supports the expansion and construction of park-and-ride facilities to provide more access to transit as an alternative to having individuals driving their personal vehicles.
5. Chisago County encourages affordable housing be located near support amenities such as schools, shopping, transportation (including transit), employment and public services.
6. The County will promote the preservation of existing housing, especially affordable housing, to cost-effectively maintain affordability and preserve the unique characteristics of the Chisago County's housing stock.
7. The County encourages local communities to remove barriers that unnecessarily increase the cost of housing while keeping minimum health and safety standards. This could include:
 - Allowing private developers to build housing at higher densities in the cities and townships that is supportive to affordable housing.

- Updating cities on possible changes to their zoning codes that could help with the development of new affordable housing.
8. The County supports the use of incentives and new regulations that encourage creativity and sustainability in housing development.
 9. The County and the Chisago County HRA/EDA should complete a new overall county housing study by 2018 to update the housing–related information and projections.

Goal: Maintain and improve the current housing stock.

Policies:

1. Promote and monitor the use of housing codes to meet minimum requirements for the protection of life, health, property, safety and welfare of the owners and occupants of residential buildings.
2. Encourage the rehabilitation of existing homes in all locations.
3. Encourage private and non-profit developers to purchase and rehabilitate foreclosed properties so neighborhood property is not negatively affected. This could include working with the Chisago County HRA/EDA and private and non-profit developers to coordinate state and federal funding applications to bring additional affordable housing to Chisago County through the purchase and rehabilitation of foreclosed properties.
4. Encourage “green” or energy efficient construction practices that use renewable energy sources and building materials, where cost-effective. Supporting non-profit organizations that administer weatherization and energy grants from the state and federal governments will help implement this policy.

NATURAL RESOURCES ELEMENT

September 2017



**Chisago County Comprehensive Plan
2017**

Natural Resources

Chisago County's physical environment is diverse; its surface and underground features vary throughout the County. Important natural features are: The St Croix River, a national wild and scenic river and popular recreation waterway, the bluffs and ravines along the St. Croix River; the county's abundant streams, wetlands, lakes, forests and groundwater; and the prime farmland soils in the southeastern and northern parts of the County.

Responsibly managing finite natural resources to prevent misuse and overcrowding is an important outcome for Chisago County. The county enjoys a bounty of natural resources including rivers, lakes, streams, wetlands, bluffs, woodland habitats and an abundant groundwater system. These rich natural assets are a part of the County's identity, enhancing the quality of life for residents and visitors and are in part, the reason that the first European visitors settled in this region. The County name comes from Ki-Chi-Saga, a Native American word that means fair and lovely waters. Natural areas recharge the aquifers, clean stormwater runoff, and slow its flow, reducing flood damage and improving the quality of rivers, lakes, streams, wetlands and groundwater. These natural resources create growth and development opportunities but require careful and responsible management.

Natural resources also provide a variety of benefits that would be costly, if not impossible, to replace. Wetlands, woods, open spaces and other native features provide wildlife habitat and offer access to nature. Research from the Wilder Foundation in 2005 "confirms that many types of open spaces, from parks and nature preserves to greenways, wetlands and lakes have a positive effect on nearby property values." Making natural resources a key part of the planning and development process will help protect highly prized natural features for current and future generations.

In 1996, the Minnesota Legislature defined sustainable development as "development that maintains or enhances economic opportunity and community well-being while protecting and restoring the natural environment upon which people and economies depend. Sustainable development meets the needs of the present without compromising the ability of future generations to meet their own needs."

Although the County is a water-rich area, the quality of its rivers, lakes and streams are degraded from stormwater runoff that carries sediment, phosphorus, nitrates, oils, road salt and other pollutants. The loss of natural areas contributes to increased runoff and lower water quality. Best management practices in agricultural, urban areas, land use development and stormwater management will reduce pollutants in surface water and groundwater. In addition, proper management of subsurface sewage treatment systems is needed to minimize impacts on surface water, groundwater and public health. The County and its local partners will continue to work to maintain and improve the quality and availability of the area's water resources to support healthy habitats and ecosystems while providing for recreational opportunities.

Protection of groundwater resources is a priority concern of the County Local Water Management Plan. Groundwater provides all the drinking water for the residents of Chisago County. Surface water resources are directly linked to groundwater. Chisago County promotes the careful management of groundwater and surface water resources and strives to work with local and state agencies to maintain a safe and abundant supply of water resources.

Chisago County aims to continue economic growth while protecting natural resource systems and providing a high quality of life. The County is attempting to meet current needs without placing environmental, economic and social burdens on future generations. In doing so, Chisago County has set the following three overarching goals for managing natural resources:

Goal 1: Use land in a manner that minimizes the impact on the County's natural resources.

Goal 2: Surface and ground water quality and quantity in Chisago County is preserved, protected, restored and enhanced for current and future generations.

Goal 3: Preserve, manage and use resources to promote a healthy environment for present and future generations.

There is a considerable amount of undeveloped land in Chisago County; much of it is subject to various environmental constraints to potential development. Many factors need to be addressed in order to ensure protection of the natural resources in the County. These include: surficial soils and geology; surface and groundwater; ditches; water management; aquifers; surface waters, wetlands and drainage; erosion control; shoreland management overlay areas; woodlands; wildlife areas; native plant communities, rare species and sites of biotic communities; aggregate and mineral resources; and solid waste.

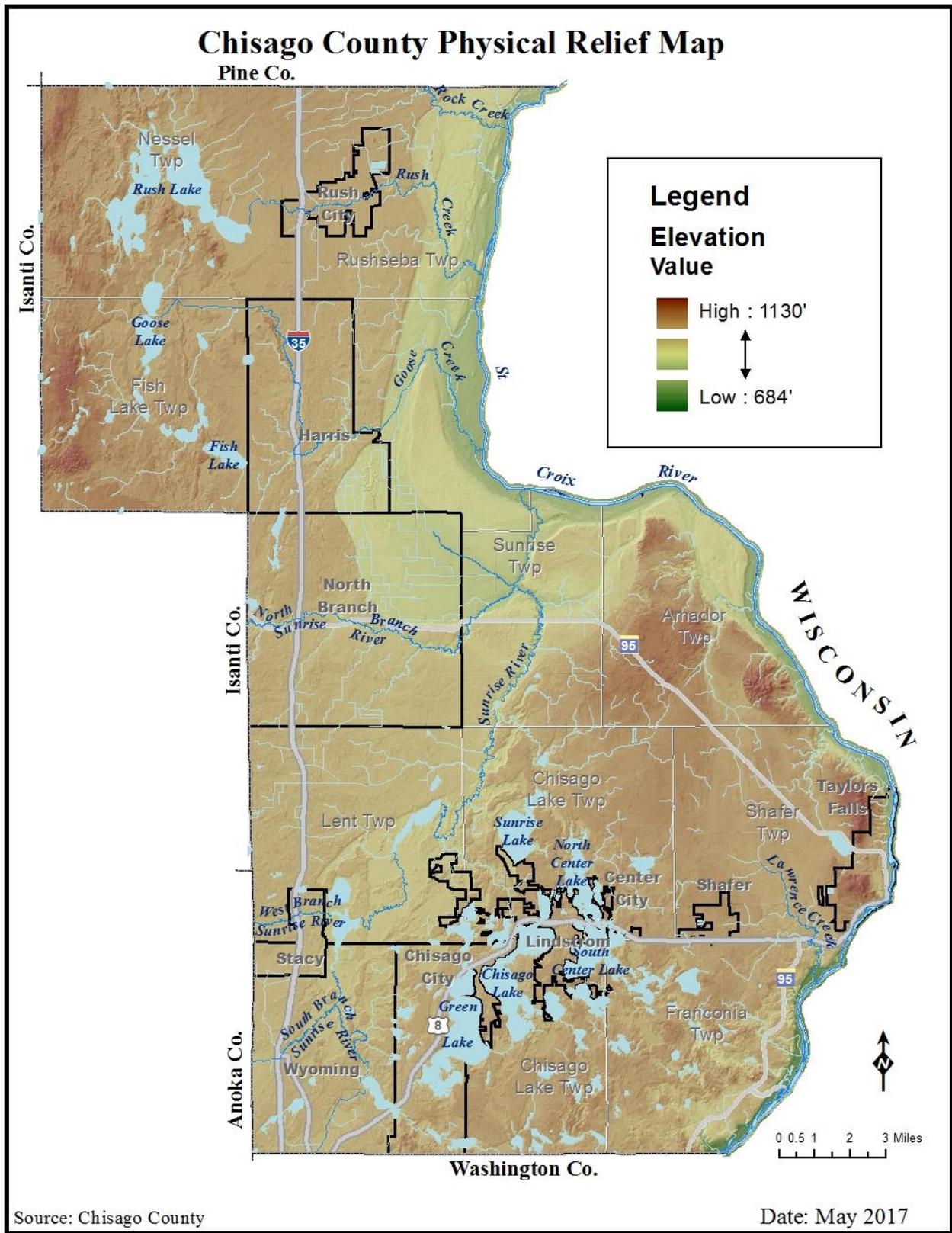
Surficial Soils

The public health and economic development of Chisago County are directly dependent on the wise use and management of its land and water resources. Accurate soil, geologic and hydrologic information are essential before decisions are made that affect natural resources. Although the amount of geologic information required for making specific decisions can vary, the information will not be used if it is unavailable when needed, or if it is available only in a highly technical form or scattered in many different maps and reports.

Erosion, vegetation and other factors have slowly changed glacial deposits creating a wide variety of distinct soil types in Chisago County. Soils are generally classified according to the origination of their parent materials, coarseness, slope and drainage. Areas with bedrock near the surface, steep slopes, wet or periodically flooded areas or soils with slow percolation rate pose challenges for development. Soils classified as

Chisago County Physical Relief Map

Pine Co.



prime farmland have a good combination of moisture-holding capacity, permeability, natural fertility, non-sloping land and chemical composition for producing food, feed, forage, fiber and oilseed crops (row crops). These lands must have a suitable growing season, an adequate moisture supply, an acceptable level of alkalinity or acidity and few rocks.

The United States Department of Agriculture Soil Conservation Service, in cooperation with the Minnesota Agricultural Experiment Station, have produced soil reports (soil surveys) for Chisago County. These reports contain general and detailed soil maps and explanations about soil properties and the use and management of soils. Soil surveys contain information that affects land use planning in the survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including:

- farmers,
- ranchers,
- foresters,
- agronomists,
- urban planners,
- community officials,
- engineers,
- developers,
- builders and
- homebuyers.

In addition, conservationists, teachers, students and specialists in recreation, waste disposal and pollution control can use the surveys to help them understand, protect or enhance the environment.

Various land use regulations of Federal, State and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making land use or land treatment decisions. The information in the soil survey is intended to help the land users identify and reduce the effects of soil limitation on various land uses. For example, the soil surveys include information about soil qualities and features. Soil qualities are the behavior and performance attributes that are not directly measured, but are inferred from observation of dynamic conditions and from soil properties. Example soil qualities include natural drainage and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly affect the use and management of the soil.

The map on page 2-7 is a generalized surficial geology map for the County. This map shows the soil types and geologic features near the earth's surface. The soils and geology are important factors that help in the understanding of the occurrence and movement of groundwater and its relation to aquifers in the County. Present soil

features are an important consideration affecting land use decisions, including on-site sewage treatment systems design, agriculture and irrigation practices.

Soils in the County range from excessively well drained to very poorly drained. The Anoka Sand Plain regions in the western part of the County are where many of the excessively well drained soils are located; this parallels the area where the sensitivity of the aquifer contamination is the highest. Evaluation of soil suitability as it relates to on-site sewage treatment systems also is dependent upon the level of the water table in the area; a higher water table will accentuate the circumstances of groundwater contamination, whereas a lower water table could reduce the impact of less suitable soils on potential groundwater contamination.

The majority of the soils in the southeastern part of the County are the Nebish-Talmoon Association. These soils are nearly level to very steep, well drained and very poorly drained loamy soils. Major uses of these soils are cropland, hayland and pasture. Main management concerns on these soils are erosion on slopes and wetness.

The soils mentioned above make up 43% of the soils in the County. There is one organic soil association in the County that is found around Carlos Avery Wildlife Management Area, Rush Lake and close to the St. Croix River in Sunrise Township. These are very poorly drained soils, with primary uses being specialty crops, sod, pasture and wildlife land. These soils also are considered to have severe soil limitations for on-site sewage treatment systems as they typically have poor percolation rates and "ponding" may occur.

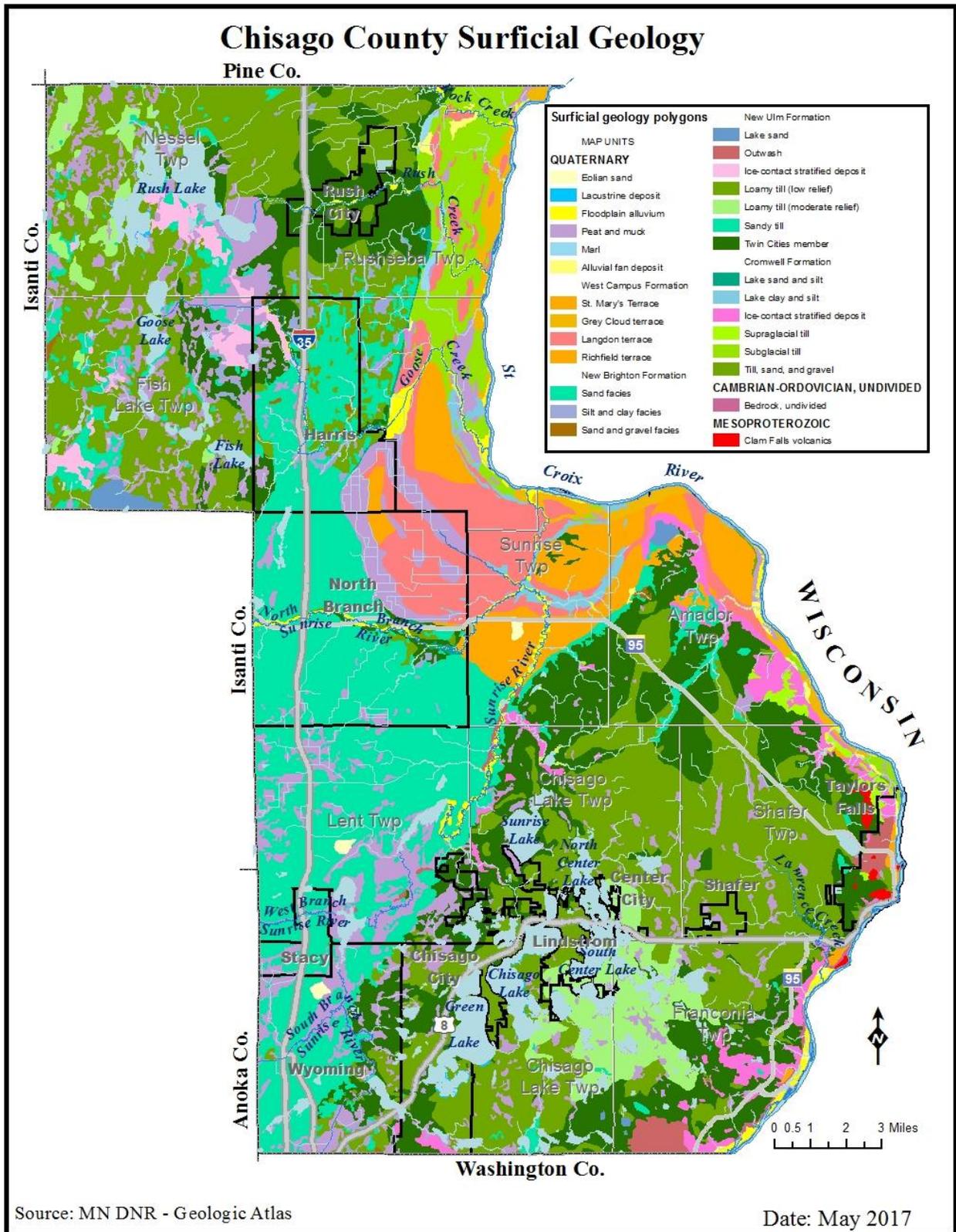
Geology

Two underlying geologic features dominate the surface geology in the County: The Grantsburg Sublobe Till deposits (an extension of the Des Moines Lobe) and the Superior Lobe Outwash deposits. The Superior Lobe consists of well-drained sand and gravel. The Grantsburg Sublobe consists of gray till with fine sandy loam or silty clay loam surface textures. The Anoka Sand Plain located in the west central part of the County resulted from the large amounts of Lacustrine Sand deposited by the Grantsburg Sublobe. The Grantsburg Sublobe, including the present day Anoka Sand Plain, covers the majority of the County from the northwestern corner to the southeastern corner, excluding the St. Croix River Valley in the northeast-central part of the County.

The University of Minnesota and the Minnesota Department of Natural Resources (DNR) recently completed an updated Geologic Atlas for Chisago County. Part A of the Atlas, which was completed in 2010, has six plates and maps with information about the geology (including the bedrock and surficial geology) of the County. This atlas has detailed geologic and hydrologic information in an interpretative and a descriptive form. Maps and texts in the atlas either summarize basic geologic and hydrologic conditions at a county scale, or interpret these conditions in terms of the impacts of possible land use and water use decisions.

Chisago County Surficial Geology

Pine Co.



Part B of this atlas, as prepared by the Minnesota Department of Natural Resources (DNR) in 2014, has four plates with information about the hydrogeology and pollution sensitivity of the geology and soils of Chisago County. This atlas shows the horizontal and vertical extent of aquifers and aquitards commonly found in Chisago County. It also shows groundwater residence time and the general direction of groundwater flow. As this atlas notes, “the hydrogeology of Chisago County is influenced by the extensive sandy surficial geologic deposits in the central part of the county and by the deeply incised St. Croix River valley that forms the eastern border of the county. Since the end of the last glaciation, the St. Croix River has downcut into the glacial sediments and bedrock creating the St. Croix River valley. Regional groundwater flow is primarily east toward the St. Croix River.”

The atlas also notes, “In Chisago County, the primary control on groundwater-flow direction is the elevation of the St. Croix River. The river serves as a key discharge area for both the buried sand and gravel and bedrock aquifers, greatly influencing groundwater-flow direction and gradients. In general, groundwater flow in Chisago County is both east and downward. Groundwater flow is primarily influenced by surface landform and subsurface sediment texture characteristics. Local groundwater-flow direction in these systems is typically toward secondary groundwater discharge areas such as smaller streams, lakes and wetlands.”

These two resources are the most update and complete information available about the geology and hydrogeology of Chisago County.

Surface and Ground Water

From its role in the early historical development of the County, water is a critical prerequisite for growth and prosperity. Access to clean water through both groundwater and the rivers will be a competitive advantage to Chisago County during the next century when many other regions will struggle to provide clean water to their residents at a reasonable cost. Chisago County has made a strong commitment to understanding and protecting its water resources. The County has allocated significant resources to planning, data collection and water governance. Managing and using the areas water resources wisely will help sustain the County now and into the future.

Although Chisago County has substantial reserves of high-quality groundwater, groundwater is a finite resource that needs protection from contaminants and depletion. The type and density of land use and geological conditions of an area determine the likelihood of groundwater quality and quantity to be affected by human actions. Chisago County will regulate land development so groundwater quality and quantity are protected from degradation and depletion and maintained in a safe condition for the benefit of all citizens. Pollution prevention will be a top priority for the County. Standards to prevent the contamination of ground water will be reviewed and strengthened if necessary. Localities adopting and following wellhead protection plans will help protect the ground water. The County will encourage landowners to manage potential sources of contamination within the areas that provide water to wells or

wellfields. Water supply wells will be protected from contamination through the proper design, location, installation and maintenance of individual sewage treatment systems. Landowners are required to seal abandoned wells.

Promoting the Wise use of Water

Chisago County is blessed with a relative abundance of high-quality ground and surface water. Rivers, vast underground aquifers and more than 50 lakes make others envious of the water resources available in the County. Aside from the beauty and the recreational value of the County's lakes and rivers, water is necessary to sustain the County's residents and economic prosperity. The aquifers continue to provide residents and businesses with a reliable water supply. The lakes, rivers and streams nurture wildlife and offer residents and visitors a variety of recreational opportunities.

Water supplies, however, are not limitless. Population growth, development, contamination, drought and the impact of groundwater withdrawal on surface waters are affecting the future water supply. Increasing reliance on groundwater as the main source of drinking water has become an issue. There are areas of the region where groundwater levels are declining which could affect lake and wetland levels. Conservation measures alone are inadequate to protect water supplies in Chisago County. Rather, the County needs to have a balance among water sources, maintain and enhance water groundwater recharge and expand the use of conservation measures. To achieve the long-term vision of the County's prosperity and livability, the county's water resources must be sustainable, supported by a countywide strategy that balances growth and protection to improve and maintain the quality and quantity of the water in the lakes, rivers, streams, wetlands and aquifers.

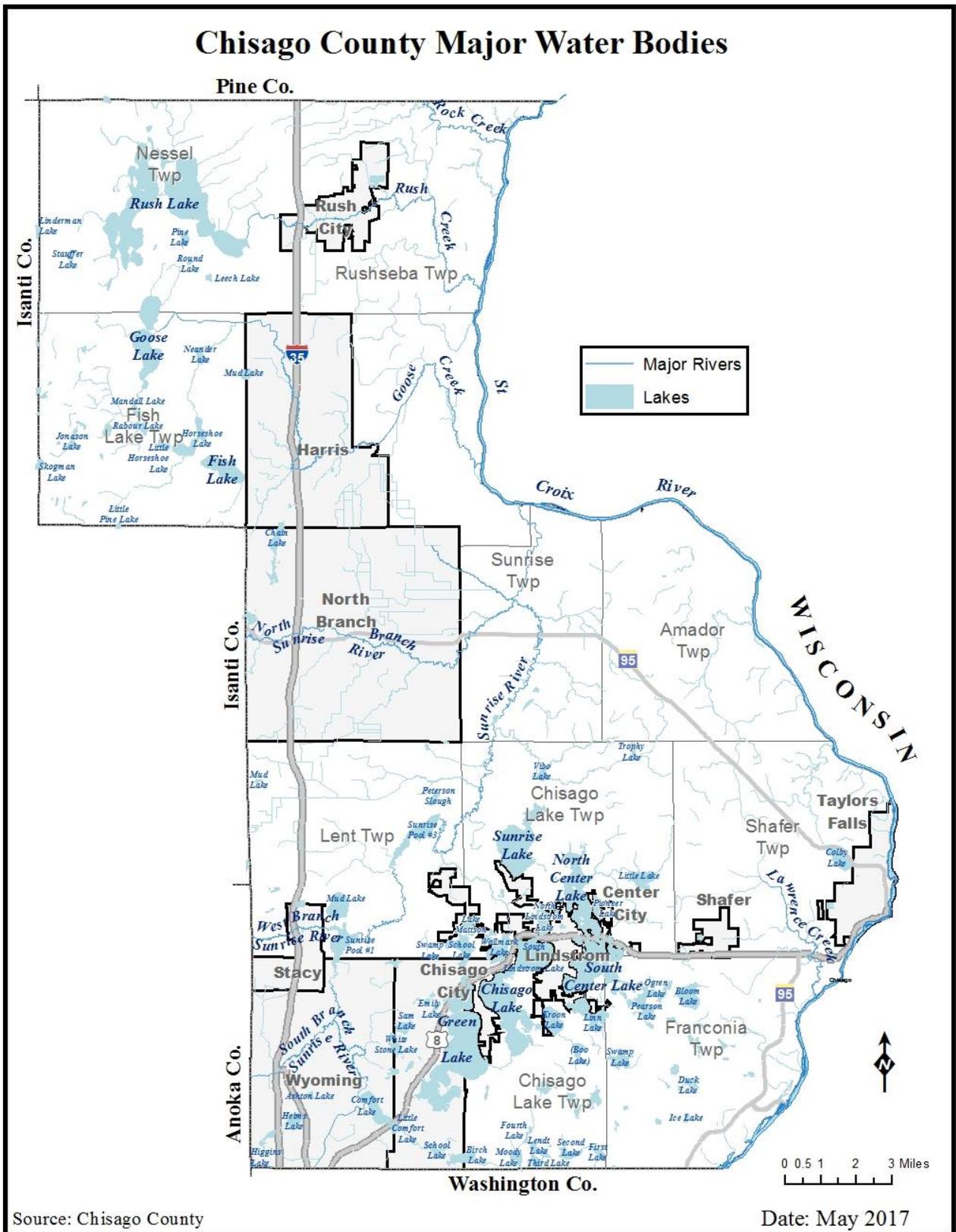
The Minnesota State Legislature uses the following definition of water sustainability:

“Water is sustainable when the use does not harm ecosystems, degrade water quality or compromise the ability of future generations to meet their own needs.”

Surface Water

Ninety-eight percent (98%) of the County is in the St. Croix River basin. The majority of the County's surface waters consist of lakes and wetlands and most are located in the southern one-third of the County. Chisago County requires surface water to be controlled to reduce erosion and flooding. Land use regulations are in place to control overland runoff, erosion of natural drainage routes and riverbanks and the obstruction of natural drainage.

Chisago County Major Water Bodies



Source: Chisago County

Date: May 2017

Rivers and Streams

The St. Croix River drains much of the County and forms the entire eastern border of the County. In 1968, the United States Congress dedicated the St. Croix River as a National Wild and Scenic Riverway, in recognition of its “outstandingly remarkable scenic, recreational and geological values.” The National Park Service and the Minnesota and Wisconsin Departments of Natural Resources manage the riverway. The National Park Service adopted a Cooperative Management Plan and Environmental Impact Statement for the Lower St. Croix National Scenic Riverway in 2002 that:

- Preserves and protects the riverway’s ecological integrity, unimpounded condition, natural and scenic resources and significant historic resources.
- Accommodates a diverse range of recreational opportunities that do not detract from the exceptional natural, historic, scenic and aesthetic resources.
- Provides an environment that allows the opportunity for peace and solitude.
- Provides an opportunity for the education and study of geologic, historic, ecological and aesthetic values to enhance further stewardship of the river.

Small streams and springs flow in the St. Croix River, draining upland lakes. The Sunrise River, Rush Creek, Goose Creek, Rock Creek and Lawrence Creek are the primary river tributaries in Chisago County.

Streams with permanent flows are groundwater fed. Storm sewers control runoff in urbanized areas and drainage ditches in historically agricultural areas have replaced some naturally existing streams. Groundwater discharges maintain flows in the rivers during times of low precipitation.

Ditches

The ditch system in Chisago County plays an important role in managing the drainage of surface water in many parts of the County. The ditches alter natural hydrology by efficiently removing water from poorly drained areas. These ditches have been constructed and have evolved in importance and function over the many years they have been in existence. Drainage ditches may have a negative effect on the water quality of the receiving waters due to erosion, movement of nutrients, pesticides, and sediments and lack of adequate vegetated buffer strips along the banks. Reducing erosion and sedimentation reduces maintenance costs for the benefitting property owners.

Most of the county ditches in Chisago County were authorized and constructed in the early 1900’s during the federal government’s sod-busting incentive period. This was an effort to expand the number of tillable acres in the United States by draining wetlands. There also were many laterals established in the 1940’s to many of these ditches. Based on best data available in 2014, there were nearly 56 miles of ditches in fourteen (14) county ditches and six (6) judicial ditches (those that traverse more than one

county boundary) established in Chisago County. (This does not include laterals). The map on page 2-13 shows the ditches in Chisago County.

In 2014, the County started a study of all the Chisago County ditches. This study was to determine, in part, the location and condition of all the ditches in the County. Staff completed the Chisago County Public Ditch System report in the fall of 2016 and the County Board accepted the report in November 2016.

On December 7, 2016, the County Board adopted a motion to form the Chisago County Public Ditch Committee (with representation from several county departments and state agencies). This Committee is to conduct a study and recommendation process about possible County actions in the implementation of the State Buffer Law and actions to assist landowners in resolving ditch discrepancies. The Ditch Committee may, from time to time, offer policy recommendations and ditch related actions to the County Board.

Aquifers

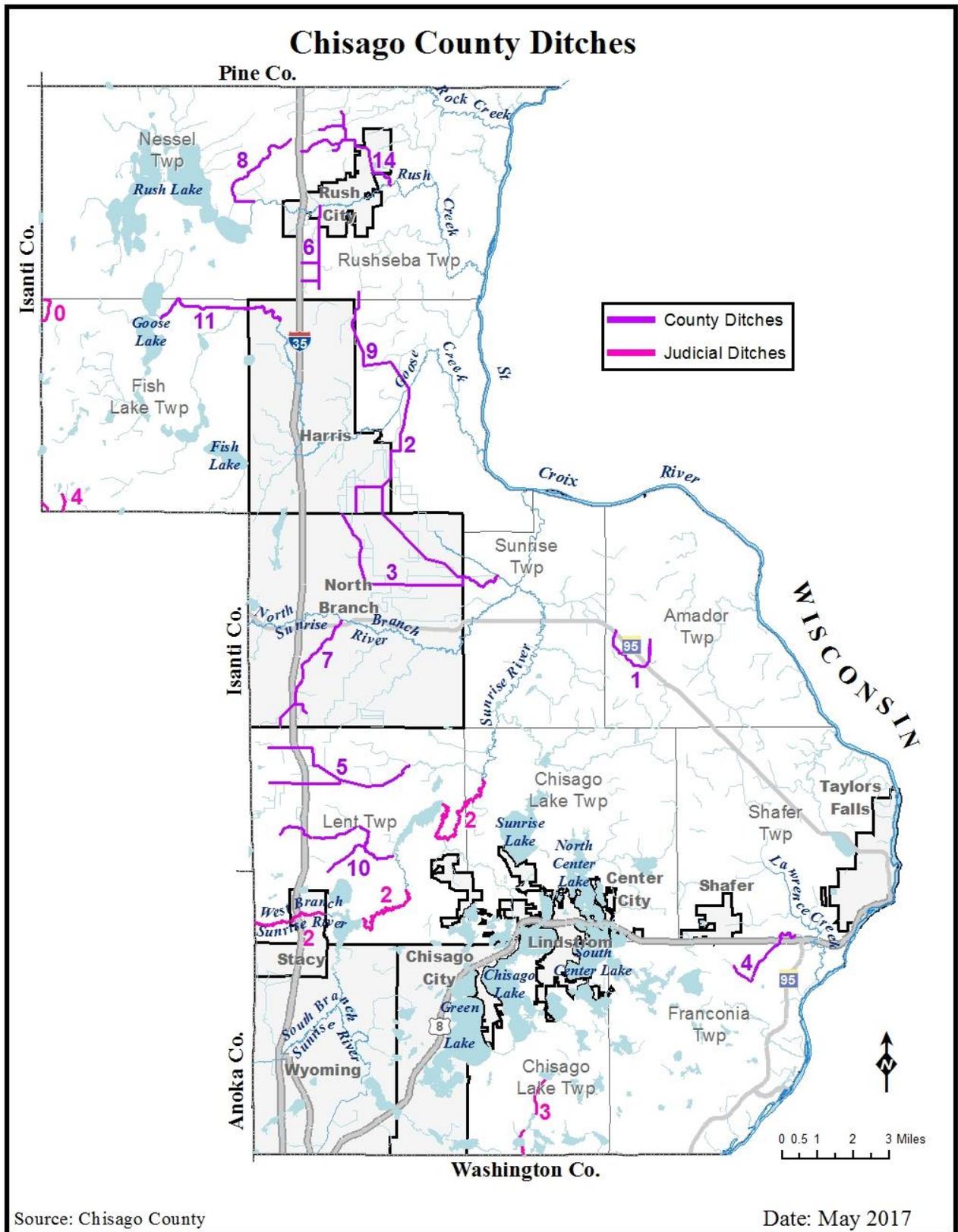
An aquifer is a sedimentary (limestone, dolomite or sandstone) rock formation, which holds and yields large amounts of groundwater. An aquifer recharge area is the area of interchange between the surface water and the aquifer. It is the principal area of adding water to the groundwater resource. Page 2-15 has the map showing the locations of the various aquifers in Chisago County.

Historically, the region's aquifers have had abundant water to serve the population. However, the amount of water available in the future may be limited. The three main factors affecting groundwater abundance are:

- The volume of replenishment to or recharge of aquifers from rainfall and snow melt;
- The volume of groundwater naturally discharged to lakes, wetlands and streams; and
- The volume of groundwater pumped out of aquifers.

Impervious surfaces associated with land development (especially in urban areas) will impair the natural ability of precipitation to infiltrate into aquifers, thereby reducing recharge water and stream base flow. The volume of groundwater pumped out of aquifers to meet household, commercial and industrial needs of a growing population reduces this resource.

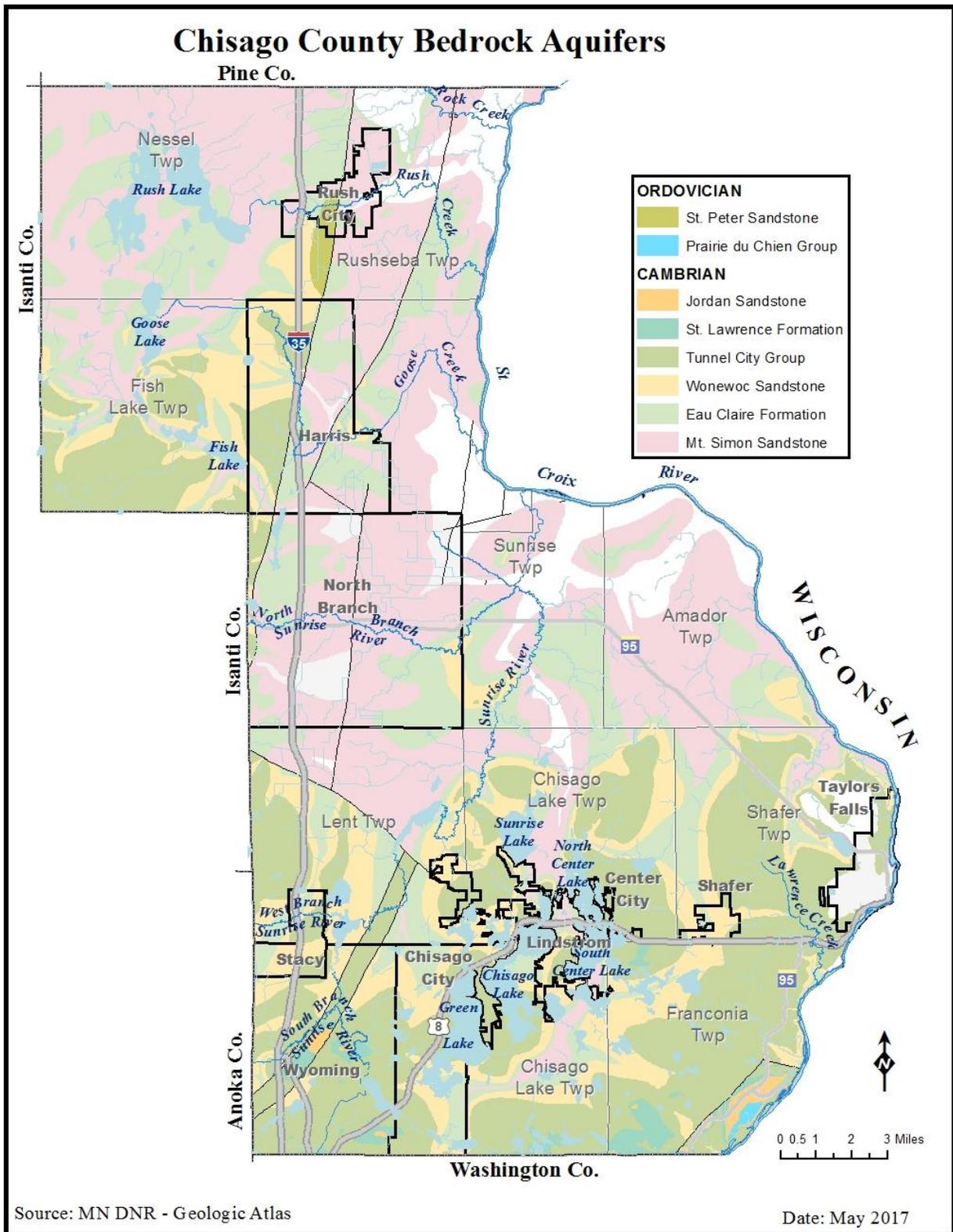
Essentially all large domestic water users in the County obtain their water from the Mount Simon-Hinckley Aquifer. Multiple communities share the region's aquifers. It takes a coordinated effort to develop sustainable groundwater management in order to balance the recharges to the resource with the discharges from the resource.



Use of surface water and groundwater for irrigation also is a significant use of water in the county. Most high-capacity wells are constructed in bedrock aquifers. As of 2010, the DNR had issued 31 permits for municipal wells and 51 permits for sod farm and major crop irrigation in Chisago County. Some of the water used in irrigation returns to the aquifer through percolation and there is no evidence to date of groundwater “mining” that is, extraction of such large volumes that results in drawdowns and actual loss of aquifer capacity.

According to the Geologic Atlas of Chisago County, precipitation is the source of recharge to the glacial sediments covering the county, which ultimately provides recharge to the deeper aquifers of the county. There are important recharge areas in Chisago County where sandy surficial sediment allows higher infiltration rates. These recharge areas are primarily in the central part of the county while the areas of the county with higher clay and silt content limit recharge. The aquifer recharge area provides a critical interchange of surface water (including lakes) to groundwater and of groundwater to surface water. Not only are the groundwater supplies replenished through the recharge area but the movement of groundwater to the surface contributes water to streams, lakes and rivers sustaining them through drought periods. Critical aquifer recharge areas occur in coarse soils and peat where percolation is rapid.

Aquifer discharge also is important for the Chisago County, property owners and water users to be aware of. Part B of Geologic Atlas provides detailed information about aquifer discharge in the county. It notes, “In Chisago County, the St. Croix River is the major groundwater discharge feature for the buried sand and gravel and bedrock aquifers of Chisago County. Groundwater also is discharged from aquifers to other surface water bodies such as the Sunrise River, Rush Creek, Goose Creek, Rock Creek, Beaver Creek, Lawrence Creek and some wetlands and lakes. Groundwater interaction with lakes and wetlands depends on the physical setting of these features. Rush Lake, Horseshoe Lake, Fish Lake and Goose Lake, located in the northwestern part of the county, receive groundwater discharge that provides perennial surface water flow from these lakes. Large wetland complexes including Carlos Avery and those located along the St. Croix River; receive groundwater discharge that supports native plant communities. In each of these cases, groundwater is recharged at a higher elevation on the land surface and flows down gradient to these features.”



Groundwater Quality

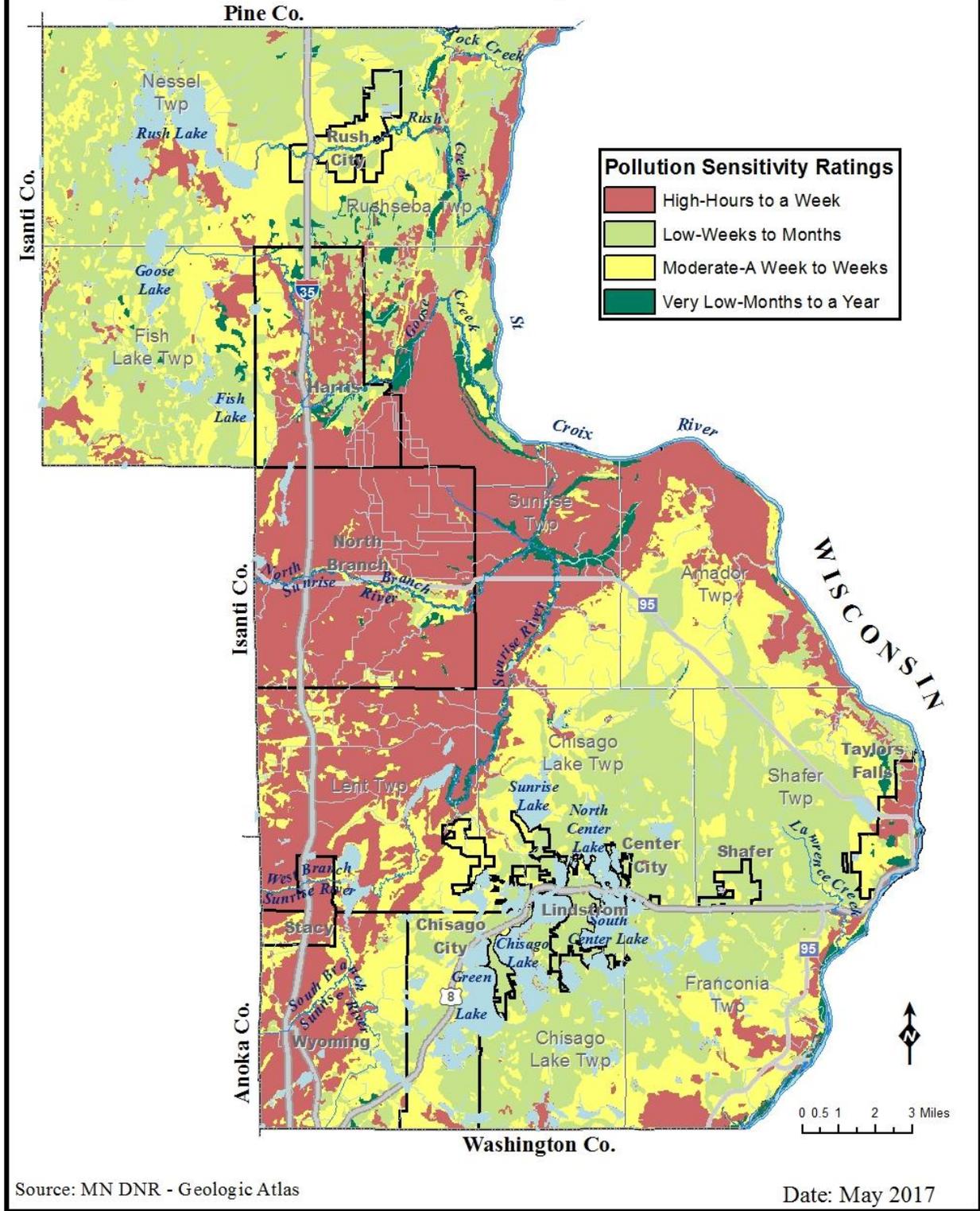
Due to the geologic conditions of the county, some of the county's groundwater reserves are highly sensitive to contamination. If not protected, groundwater quality could be reduced. The fundamental factor to contaminant movement in groundwater is the hydrogeology of an area. Shallow bedrock, high water tables and rapid infiltration rates all contribute to groundwater sensitivity and are all found in Chisago County.

The map on page 2-17 identifies areas in the County that have different degrees of pollution sensitivity that correlate with the susceptibility of groundwater contamination. The ratings are based on characteristics of the overlying soils over the aquifer. Susceptibility is based upon the speed of water moving through the soil. This speed then determines the ability of the soil to absorb contaminants, transform them into inert substances, and dilute them to be inactive or control the rate at which they flow to the aquifer. As indicated by the map on page 2-17, a significant area of land in Chisago County is highly or very highly susceptible to groundwater contamination in a relatively short period of time from when potential contaminants are introduced to the soil. This is an area of concern for the County, and supports a need to adopt strong policies that will provide protection of groundwater in the County and the surrounding areas.

The Mount Simon Hinckley/Fond du Lac bedrock aquifer is the main source of groundwater for the County. The Franconia/Ironton/Galesville aquifer extends into the southern part of the County and serves the Chisago Lakes area, a part of Franconia Township and the parts of the City of Wyoming. A part of the Mount Simon Hinckley aquifer underlies the Anoka Sand Plain, has moderate (years to decades) to low (decades to a century) sensitive ratings to water-borne contaminants. The sandy soils aggravate aquifer contamination at a much faster rate than loam or clay soils. This becomes more of a concern for future development with individual sewage treatment systems in areas such as the Anoka Sand Plain where the sensitivity rating is very high (hours to months) to high (weeks to years).

The impact of actions within Chisago County regarding groundwater extends beyond the county's boundaries. Contamination of groundwater in the County from herbicides, fertilizers or ineffective on-site septic systems can greatly affect the quality of water retrieved from wells. Alternately, indiscriminate use of groundwater supply in more urbanized areas can affect the availability of groundwater used for private wells in Chisago County.

Chisago County Pollution Sensitivity of Near Surface Materials



Water Management

Protecting and conserving water resources is important for maintaining high quality drinking water, healthy rivers and streams, clear lakes, fish habitat, rare plants, quality of life and economic vitality. Chisago County adopted its first Comprehensive Local Water Plan in January 1993 and updated the plan in 1998. The plan was again updated and received State approval in the fall of 2006 and in the fall of 2013. The County adopted the most recent version of the local water plan based on the findings in the Priority Concerns Scoping Document dated August 7, 2012. The local water plan provides an ongoing process for addressing water related issues such as land use impact on groundwater, water wells and wellhead protection, groundwater recharge areas, individual sewage treatment systems, groundwater monitoring and surface water.

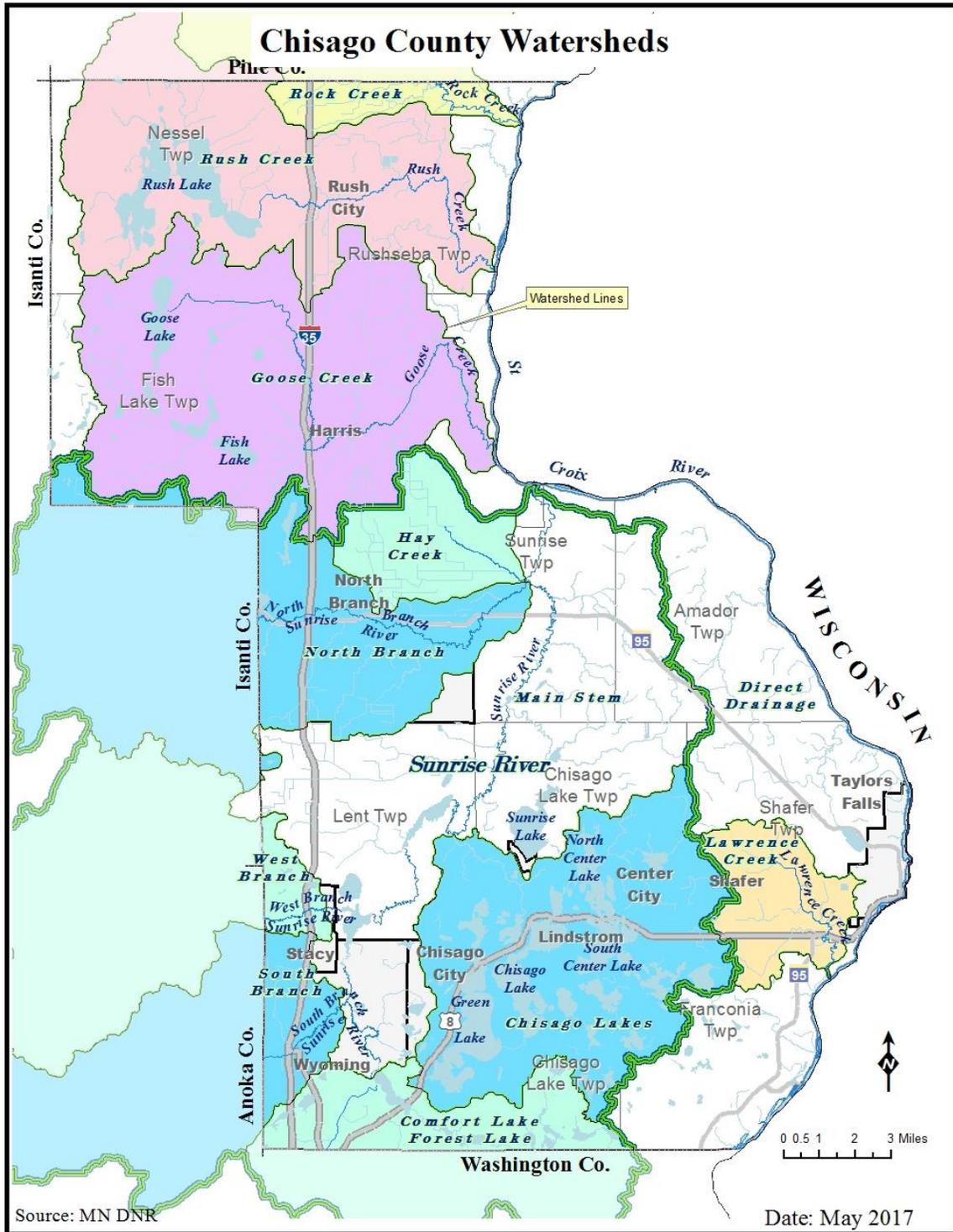
The overall vision of the Comprehensive Local Water Plan is: surface and groundwater quality and quantity in Chisago County is preserved, protected, restored and enhanced for current and future generations.

Chisago County provides overall leadership, coordination and monitoring for implementation of the local water plan. The Chisago County Soil and Water Conservation District has adopted the local water plan as their work plan. Implementation of the County Water Plan falls to every city, watershed organization and agency with a stake in protecting Chisago County's groundwater resources. The Plan focuses on efforts to reduce or eliminate the future degradation of water quality through initiatives involving community and regional planning, zoning policies, regulations, research, education and consultation. Cities can address water quality by amending zoning ordinances, taking into consideration the effect of land use on water quality. Water resource agencies can develop rules and provide help to urban and rural citizens using education and technical information. Collaboration between citizens, businesses, cities, local government and state agencies is the key to protecting water quality. The local water plan acknowledges the important link between protection of both groundwater and surface water resources.

There are two watershed organizations in Chisago County. The Chisago Lakes Lake Improvement District (the "LID") contains the communities of Center City, Chisago City, Lindstrom, Shafer and Chisago Lakes and Lent Townships and has a population of about 14,000. There are 19 lakes in the LID with a combined surface water area of over 7,000 acres. The mission of the LID is to restore, preserve, protect and enhance the water resources of the Chisago Lakes Chain of Lakes Watershed.

The Comfort Lake – Forest Lake Watershed District (CLFLWD) encompasses about 47 square miles in northern Washington County and southern Chisago County, including the cities of Chisago City, Forest Lake, Scandia and Wyoming. The mission of the Comfort Lake Forest Lake Watershed District is to protect and improve its water resources through adaptive management approaches and education of local stakeholders.

Both of these watersheds outlet to the Sunrise River, which flows northeast through Chisago County before discharging to the St. Croix River. The Chisago County Local Water Management Plan includes many of the goals and objectives of these Watershed organizations. The map below shows the location of these two watershed organizations and all the watersheds in Chisago County.



Waste Management

Wastewater Disposal

Subsurface sewage treatment systems (SSTS) or septic systems are widely used throughout Chisago County. The county provides SSTS inspections and enforcement for many of the county cities and townships (except North Branch, Stacy, Lent Township, Shafer, Taylors Falls and Wyoming). Such systems, when not functioning properly or when inappropriately designed or sited, do not adequately treat human waste. This may allow nutrients and pathogens to migrate into groundwater. Some nitrate contamination occurs because of septic system use, even with new systems. Coliform bacteria contamination, which is much more serious and rare, could result from improperly constructed or inoperable septic systems.

Chisago County adopted its Individual Sewage Treatment System (ISTS) Ordinance in 1988 and updated it in 2010. The Ordinance regulates the location, design, installation, use and maintenance of both individual and community septic systems and requires inspection of new sewage treatment systems as well as point of sale inspections.

Septic tank and drainfield systems are required for on-site sewage treatment systems for new development. The County may make exceptions when housing is clustered as part of an open space design development. To the extent authorized by state law, the County may allow the use of alternative types of systems for replacement systems if they can be designed, located, installed and maintained to prevent contamination of surface and groundwater and public water supplies within the county and if adequate administrative procedures are in place to ensure accountability.

The county will give consideration to allowing community sanitary sewer systems to serve small groups of houses in a cluster development. These systems are regulated by Chisago County ordinances. If the system is larger than 10,000 gallons per day, Minnesota Pollution Control Agency (MPCA) regulations apply and the owners or operators must get a permit from the state. Operating licenses are required for these systems.

Areas with bedrock near the surface, steep slopes, wet or periodically flooded areas, or soils with slow percolation rate, have severe limitation for the installation of subsurface sewage treatment systems. These soils are present throughout the county. Bedrock within three feet of the surface can be found along the St. Croix River and in other scattered areas of the county. Soil treatment systems that are placed too close to fractured bedrock do not adequately treat sewage effluent. In these areas, sewage may move through the rock and enter wells without receiving sufficient filtration to remove the chemical and bacteriological contamination.

Steep slopes are common in the county – especially in the St. Croix River valley. Slope is a property that affects the difficulty in layout and construction as well as the risk of erosion, lateral seepage and the down slope flow of effluent. Drain fields on steep

slopes need additional soil investigation and careful design to ensure side seepage does not occur.

There are areas in the county (especially in the north) with soils with slow percolation rates. Slow percolation rates indicate soils that are tight and take longer to accept sewage. Systems placed in these soils require careful attention to sizing the system.

The County ISTS Ordinance also requires systems classified as imminent health threats to be upgraded or discontinued within 60 days. As of January 1, 1996, the State mandates that all counties adopt and enforce Minnesota Rules Chapter 7080 regarding on-site sewage treatment system standards.

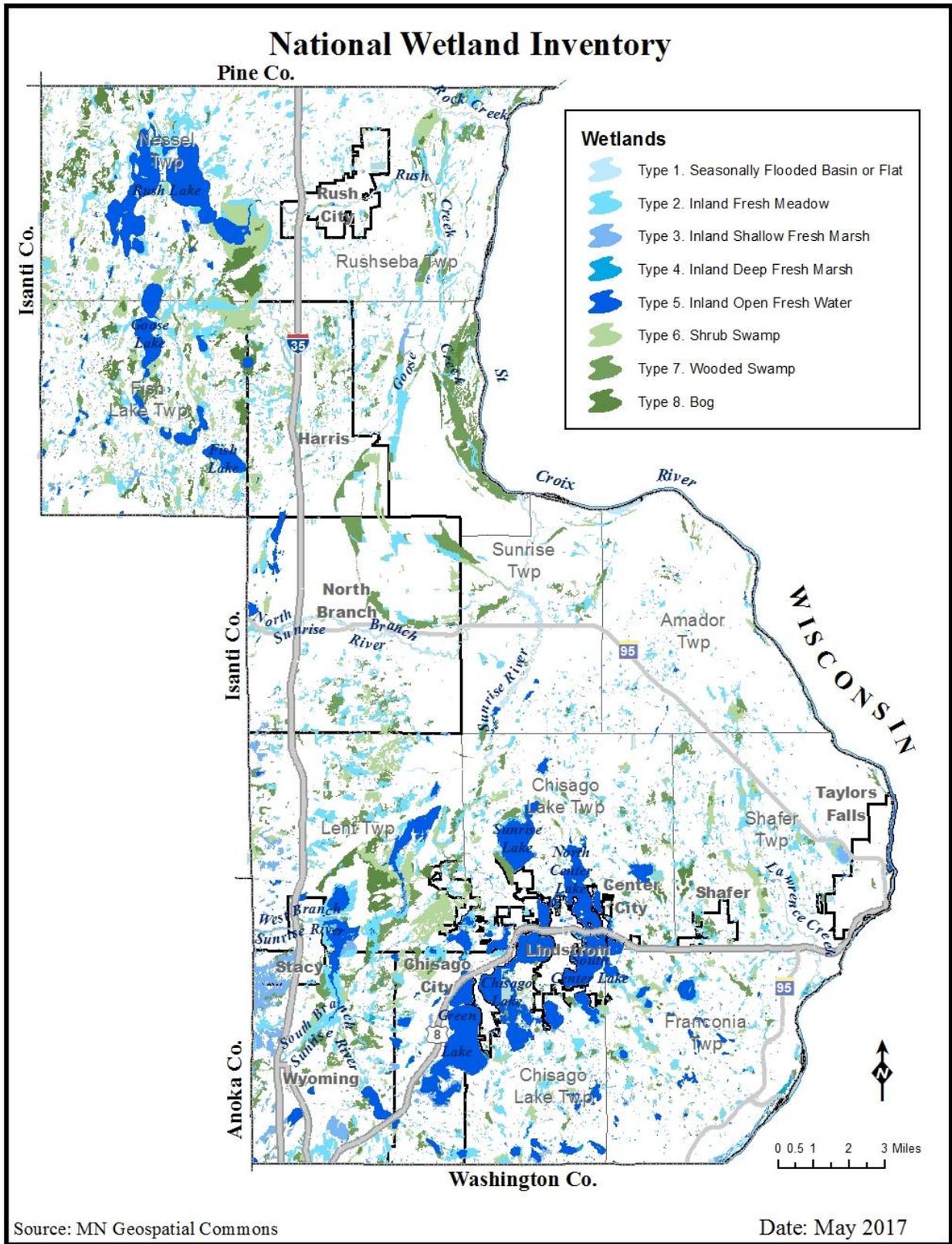
More information about wastewater treatment options and groundwater use and supply is included in the infrastructure element of this plan.

Wetlands & Drainage

There are extensive waters and wetlands in Chisago County. The County has primary responsibility for the enforcement of regulations to protect these waters through administration of the County Shoreland and Floodplain Management Regulations. The County regulations conform to the most current shoreland rules established by the Minnesota Department of Natural Resources.

Over the last 100 years, the County has lost much of its original wetland area - primarily due to draining for agricultural purposes and urban style development. Wetlands provide many functions including filtration of surface water, infiltration for groundwater recharge, storing runoff from storms and snowmelt, flood attenuation, wildlife habitat, aesthetics, recreation and spatial separation between other land uses. The Minnesota Department of Natural Resources (DNR) regulates wetlands on the 1985 Public Waters Inventory (PWI). The PWI (which includes lakes, rivers, major streams and ponds) lists the type 3, 4 and 5 wetlands that are either over 10 acres in unincorporated areas or two and one-half acres in the incorporated areas of the county. The map on page 2-22 shows the wetlands (by type) in Chisago County.

The National Wetlands Inventory (1992) and the MLCCS (2004-2007) also compiled wetland information countywide. The Federal Clean Water Act initiated wetland protection. The State followed with the passage of the Wetland Conservation Act (WCA) in 1991 that set the state wetland protection policy. The State act strives to “achieve no net loss in the quantity, quality and biological diversity of Minnesota’s existing wetlands,” as well as promote restoration of formerly impacted wetlands. This law requires avoidance of direct and indirect impacts that would destroy or diminish wetlands and replacement of wetland values where avoidance is not feasible or prudent. The WCA applies to all wetlands except those under the jurisdiction of the DNR.



The Wetlands Conservation Act of 1991 provided the County with responsibility for administration of the Act. This includes review and approval of all applications for altering wetland areas in the county as well as permitting, monitoring and assistance with mitigation. Chisago County participates in the WCA review process via the Chisago County Soil and Water Conservation District, as per statutory mandate and voluntary cooperative agreements.

Wetlands serve the function of storing runoff from storms or snowmelt; if they are developed, more severe flooding of watershed is likely. In addition to development concerns associated with wetlands, they serve as habitat for various unique or endangered species. Chisago County has a variety of endangered species that make wetlands their habitat. Among these are the Blandings Turtle, Lake Sturgeon, Butterfly Mussel, American Bittern and the Wood Turtle. It is for these reasons that wetlands should be protected as permanent open space with no development allowed.

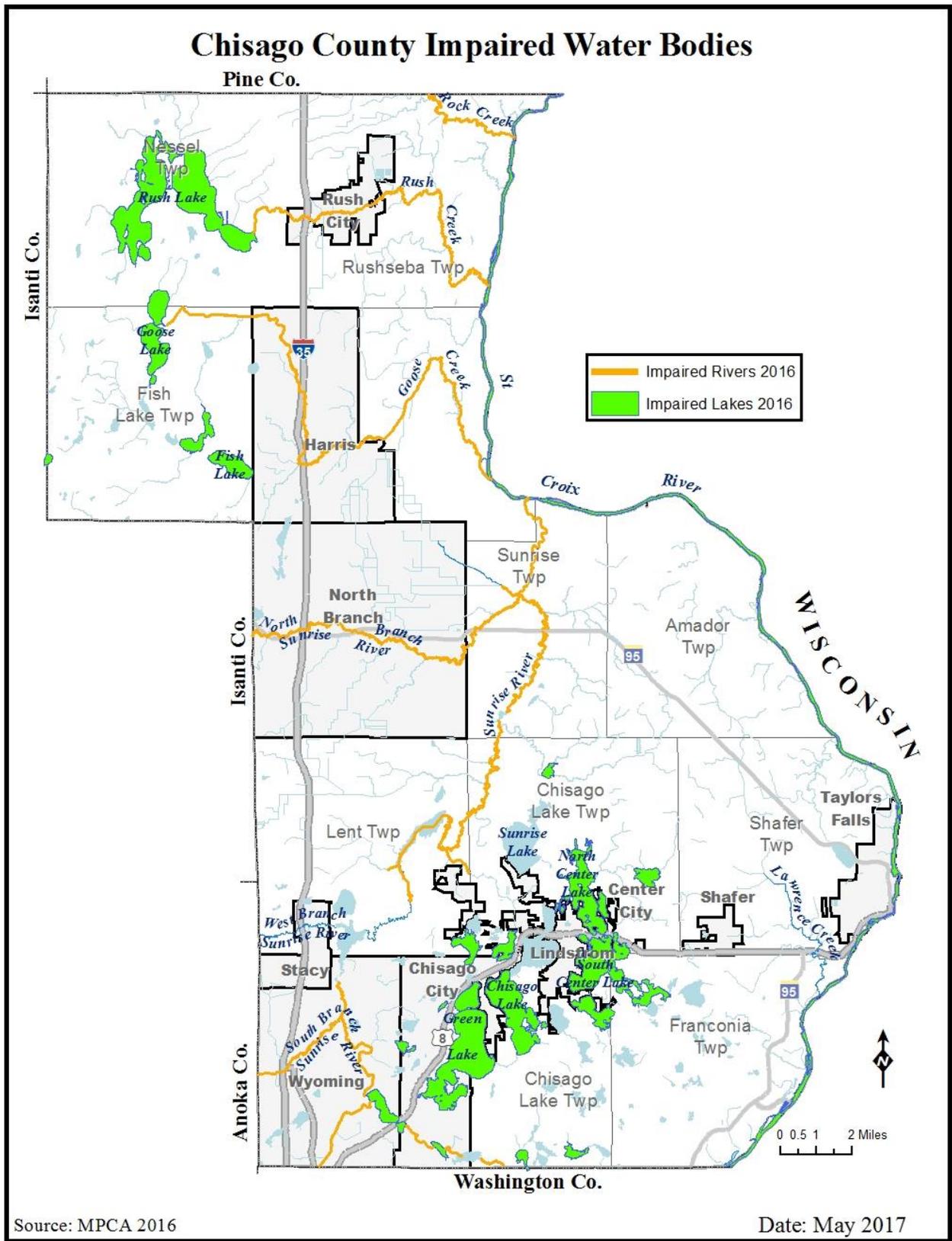
Some major concerns relating to surface water quality and drainage are: erosion control, current drainage practices and regulations, pollution and sedimentation from runoff.

Non-point source pollutants can be traced to two primary sources: Urban-style land development and agricultural practices. Urbanized land development generally increases the volume of runoff, as well as the concentration of pollutants in the runoff. Detention ponds and rainwater gardens are methods of mitigating these impacts. Even well designed ponds will not reduce the volume of runoff resulting from urbanization; however, a rainwater garden or pond designed and constructed with best management practices will reduce the amount of runoff actually entering the ground water by increasing infiltration through the soil.

Agriculture also is a contributor of non-point source pollutants. Non-point source pollution occurs because of intensive land cultivation and husbandry practices, and appears in three different forms: soil erosion; agriculture supplements such as nutrients, pesticides and herbicides; and animal waste products. When each of these sources enters water bodies, they change the aquatic environment by limiting light penetration of the water and resulting in the transmissions of toxins to area water bodies.

Many areas around the lakes in the County have already been widely developed; the Lindstrom, Center City and Chisago City lakes area (the Chisago Lakes area) being a good example. It is expected the desire for further development around water bodies will continue into the future. It is important to recognize the impacts of development on the surface and groundwater quality of the lakes, rivers and wetlands and to prevent further degradation. There are specific issues dealing with future development that will impact the County related to surface water management that the County will need to address. The map on page 2-24 shows the impaired water bodies in the county in 2016 as determined by the Minnesota Pollution Control Agency (MPCA).

Chisago County Impaired Water Bodies



Source: MPCA 2016

Date: May 2017

Erosion Control

Two main causes of erosion are inadequate farming practices and insufficient protection of exposed soils during construction. Erosion results in the loss of valuable topsoil and clogs drainage ways and culverts, causes sedimentation that reduces water quality, and reduces storage capacity of lakes and ponds. Careful planning and regulation related to conservation of soils, water and natural vegetation could reduce erosion, runoff and sedimentation. Mineral extraction operations are found in several locations in the County. Extraction sites may potentially result in erosion, sedimentation and water problems if they are not adequately planned and regulated.

Steep slopes, defined as eighteen percent (18%) or greater, are generally not suitable for any type of development, as they are very susceptible to erosion. If they are not properly managed, they may result in building foundation problems. Steep slopes in the county are fairly limited and are located primarily in areas along the St. Croix River.

Chisago County requires property owners and contractors to control surface water runoff to reduce erosion and in the incidence of flooding. Land use regulations are in place to control overland runoff, erosion of natural drainage routes and riverbanks and the obstruction of natural drainage.

Shoreland Management Overlay Areas

The uncontrolled use of shorelands in the county affects the public health, safety and welfare by contributing to the pollution of public waters and potentially decreasing property value. With the many water bodies in the County come miles of shoreland and floodplains. Regulations regarding shoreland and floodplain areas that supplement the County's zoning regulations are in effect and administered by Chisago County. The county uses its floodplain ordinance to reduce the severity and extent of flooding by controlling new development as well as the extension, conversion or structural alteration of existing structures in the floodway, flood fringe or general floodplain districts. Nearly all of the waters and wetlands in the County are DNR-protected.

There are three types of lake classification and four river classifications that exist in Chisago County:

General Development Lakes have greater than 225 acres of water per mile of shoreline, over 25 dwellings per mile of shoreline, and are over 15 feet deep.

Recreational Development Lakes have between 60 and 225 acres of water per mile of shoreline, between 3 and 25 dwellings per mile of shoreline and are over 15 feet deep.

Natural Environment Lakes have less than 150 total acres, less than 60 acres per mile of shoreline, less than three dwellings per mile of shoreline and are less than 15 feet deep.

Forested Rivers are in forested, sparsely to moderately populated areas with some roads.

Transition Rivers are in a mixture of cultivated, pasture and forested lands.

Agricultural Rivers are in intensively cultivated areas.

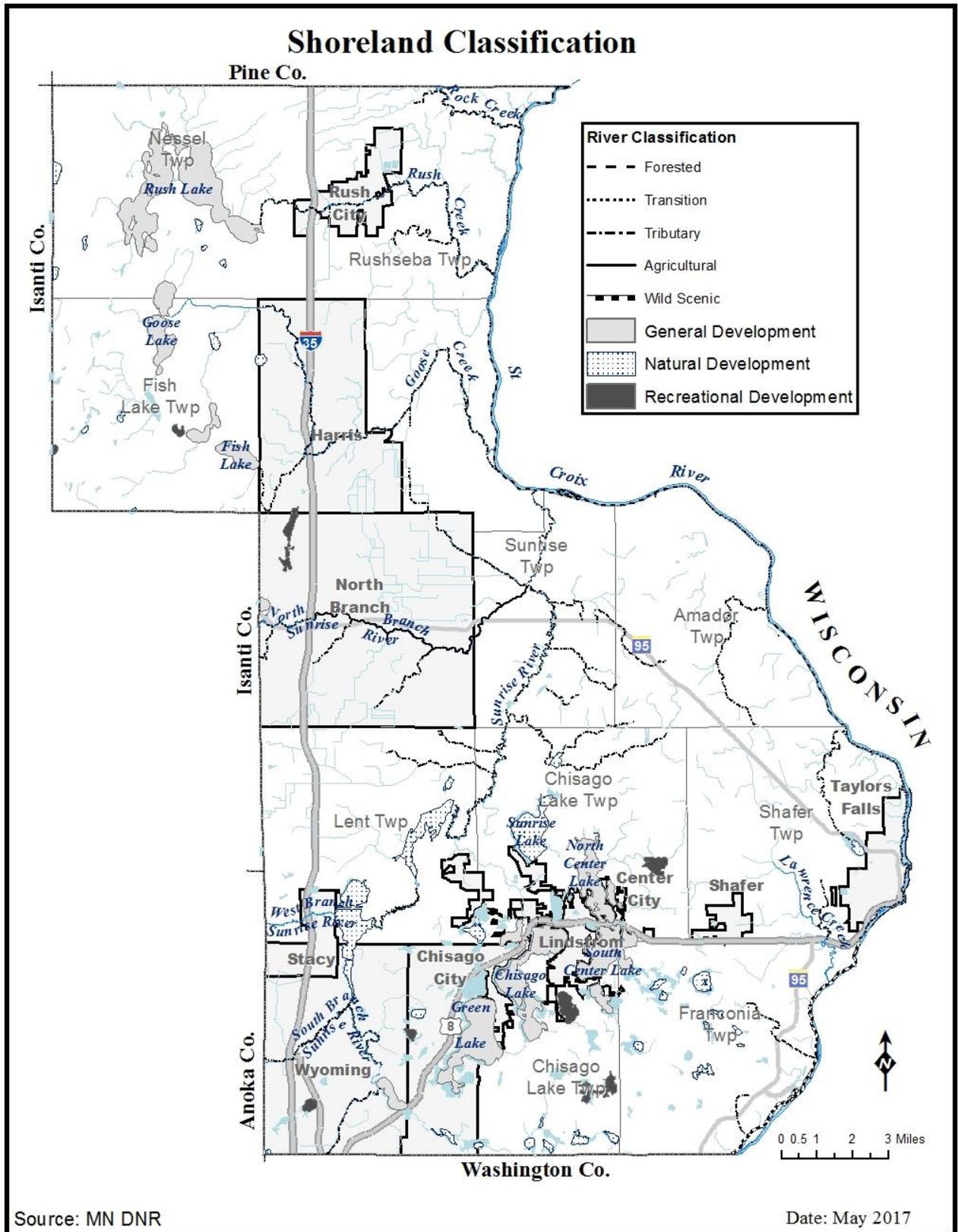
Tributary Rivers are all other rivers in the Protected Water Inventory.

The map on page 2-27 shows the Minnesota DNR Shoreland classifications of lakes and rivers in the County. In addition to the State classifications, the St. Croix River also is federally protected. In 1968, the United States Congress dedicated the St. Croix River as a National Scenic Riverway, in recognition of its “outstandingly remarkable scenic, recreational and geological values.” The National Park Service and the Minnesota and Wisconsin Departments of Natural Resources manage the riverway. The National Park Service adopted a Cooperative Management Plan and Environmental Impact Statement for the Lower St. Croix National Scenic Riverway in 2002 that:

- Preserves and protects the riverway’s ecological integrity, unimpounded condition, natural and scenic resources and significant historic resources.
- Accommodates a diverse range of recreational opportunities that do not detract from the exceptional natural, historic, scenic and aesthetic resources.
- Provides an environment that allows the opportunity for peace and solitude.
- Provides an opportunity for the education and study of geologic, historic, ecological and aesthetic values to enhance further stewardship of the river.

At the time, the Lower St. Croix was established as a National Scenic Riverway, the State concurred with the decision and as a result, federal and state governments protect that portion of the River. Recognition of the County’s unique amenities and need for special management have resulted in previous actions by the County, State and U.S. government to protect the natural systems. The Federal government enacted legislation establishing the St. Croix Wild and Scenic River and St. Croix National Scenic Riverway. The State of Minnesota has developed Interstate and St. Croix Wild River state parks along the river. The State also has acquired extensive property in Chisago and Anoka Counties known as the Carlos Avery Wildlife Management area.

The Federal government has acquired extensive shoreland property along the St. Croix River; however, the majority of land protected near the river is regulated through overlay management districts in the County Zoning Ordinance. The State owns title to and manages the state parks and wildlife management areas. A portion of the Upper St. Croix River in northern Chisago County is designated as the Chengwatana State Forest. Chisago County has adopted overlay management standards for all other protected waters in the County. Special management concerns and programs have been established as part of the County Zoning Code for the St. Croix River, Sunrise River, Sunrise Lake and Carlos Avery Wildlife Management Area.



Woodlands

The 1990 Minnesota Land Use and Cover Statistics showed 80,198 acres of scattered woodland areas in the county. The general locations of the woodlands in 1990 are shown on the map on page 2-29. The most contiguous woodland areas exist along the St. Croix River. Besides wildlife and recreation areas, the County woodland areas are a source of commercial agriculture including Christmas tree production and pine plantations.

The principal types of woodlands and their locations are as follows:

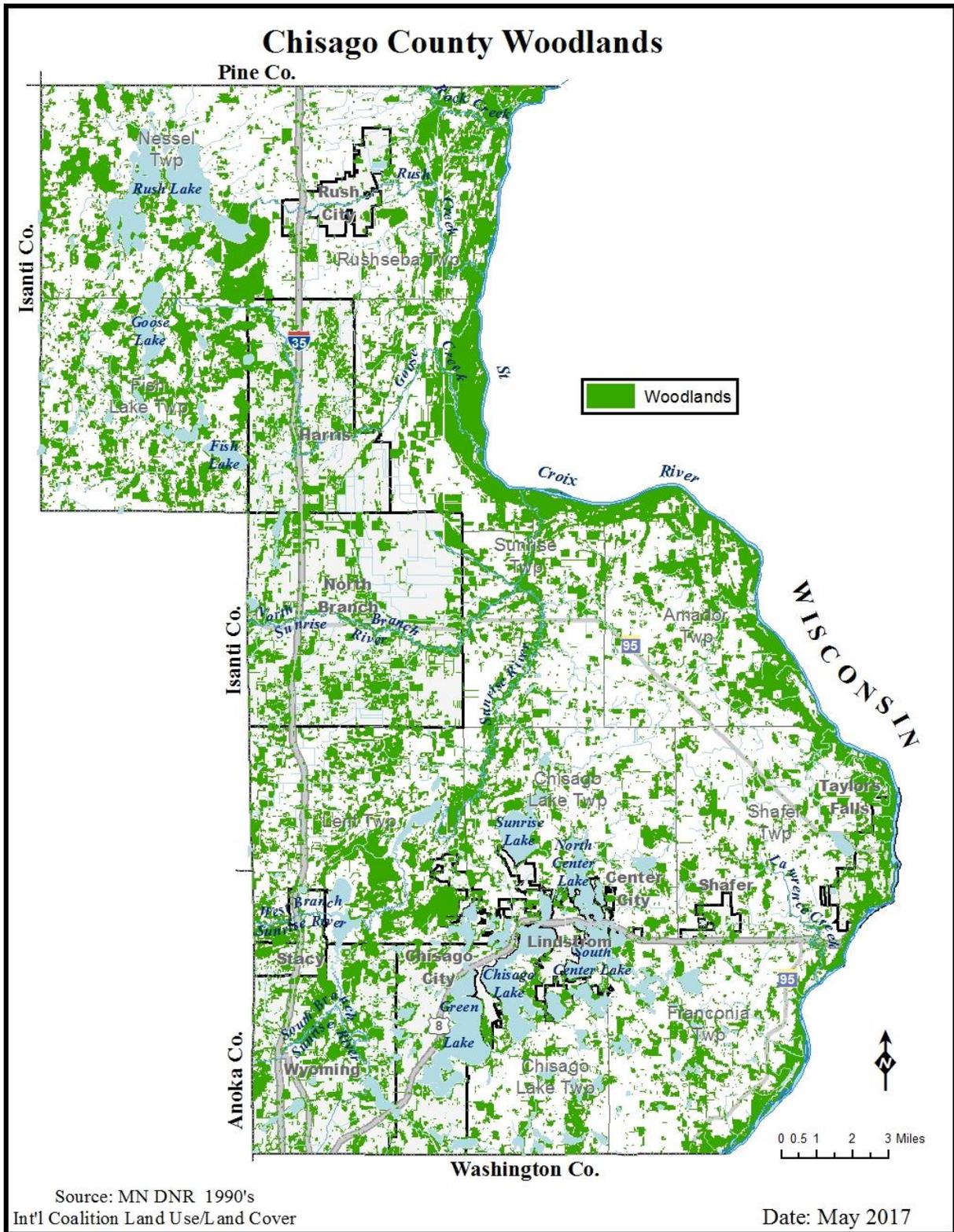
- Hardwoods – southeast to central and northeast
- Oak and Oak Savannah – west to north central
- White and Red Pine – central reaches of the St. Croix
- Swamp Conifers – Carlos Avery, Stacy area, north central & Rush Lake area
- Mixture Hardwoods and Pine – northwest area

The map on page 2-30 shows the types of land cover in the county in 2011.

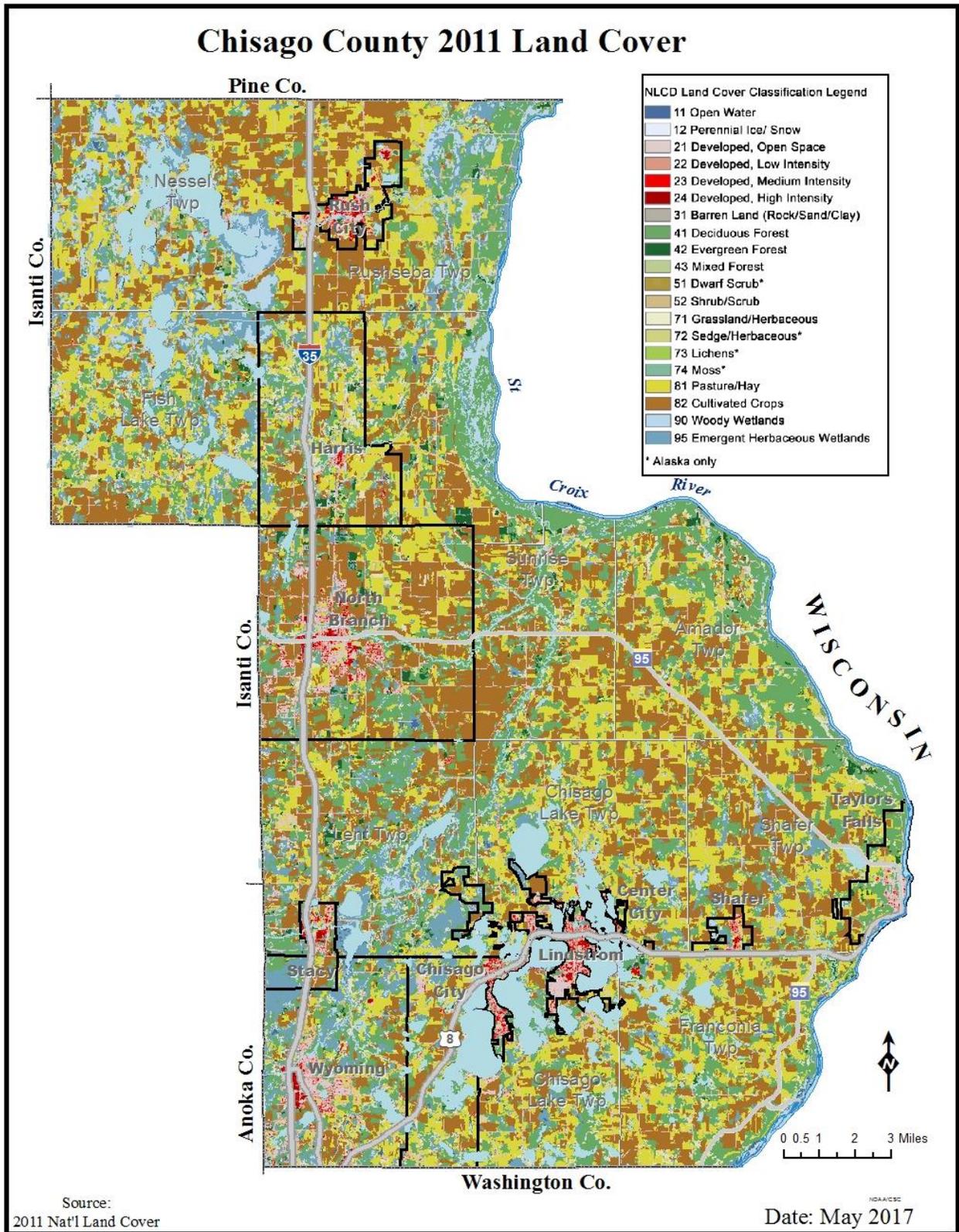
Wildlife Areas

There are four state and federal wildlife areas in the county: the Carlos Avery Wildlife Management Area, the St. Croix Wild and Scenic River Area, the Lindstrom Wildlife Preserve in Chisago Lakes Township and the Janet Johnson Wildlife Management Area in North Branch. Wildlife areas have been important recreational functions in the County, providing breeding areas for wildlife and in some cases, excellent hunting areas. With urbanization, the nature and extent of wildlife areas is threatened. A method to insure continuous wildlife habitat is purchase and management of the property, which the State has done.

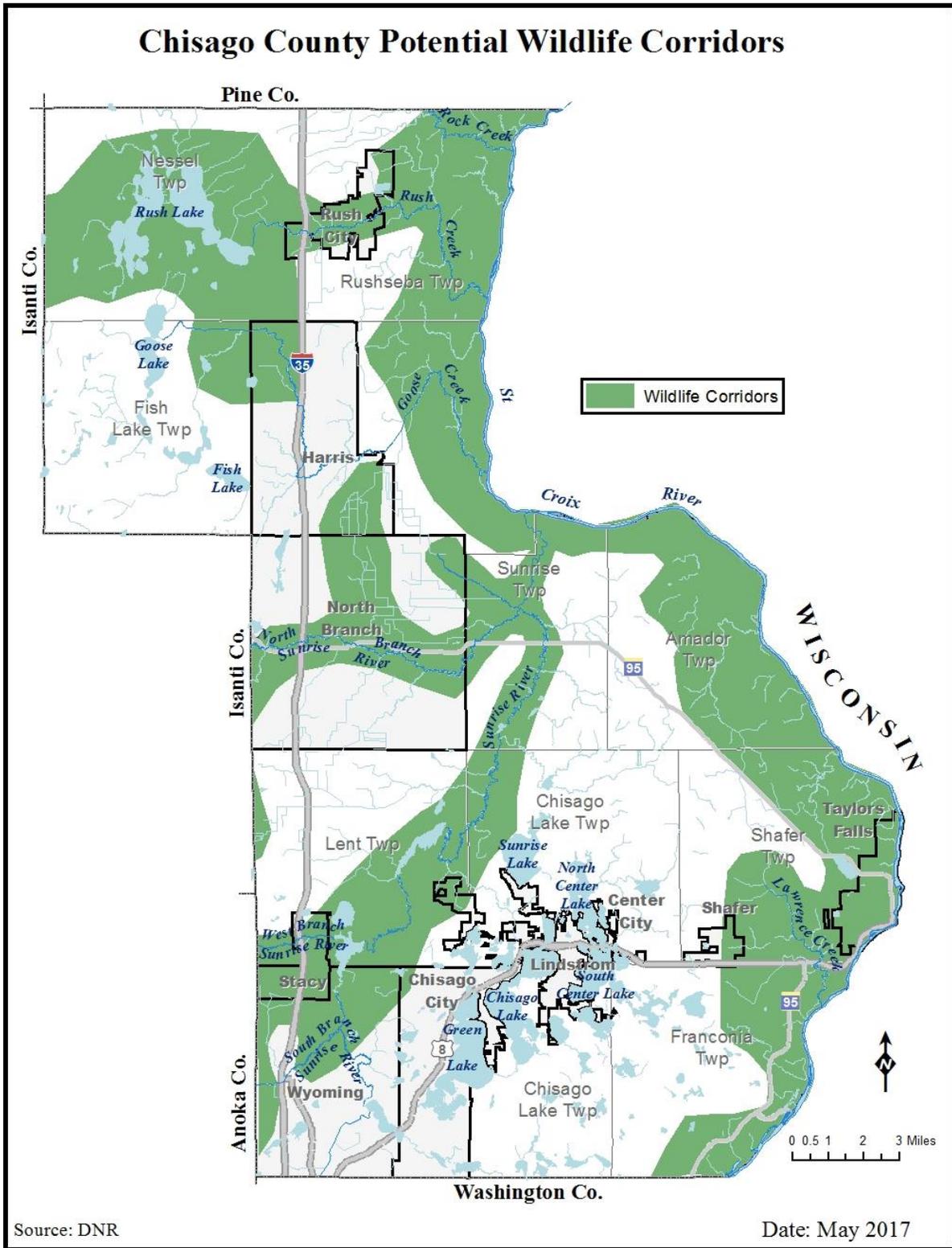
In 2004, the Metro Wildlife Corridor Program expanded to include Chisago County. The Metro Wildlife Corridors was a program that was established in 2003 because of the ecological assessment that was completed between the years 1999 – 2003 for the seven county Green Corridor project. This program was originally designed to provide funding for habitat protection and restoration in the seven county Twin Cities Metro Area. It was a partnership of 13 private and public organizations including: Ducks Unlimited, Friends of Minnesota Valley, Friends of Mississippi River, Great River Greening, Minnesota Land Trust, Minnesota Valley NWR Trust, Pheasants Forever, The Trust for Public Land and various DNR Divisions. The program used a strategy for accelerating and enhancing habitat focus areas and better coordinating efforts of conservation organizations. In 2005, a legislative commission recommended a State appropriation of \$3.53 million for Metro Wildlife Corridors to address needs in an expanded area including Sherburne, Isanti, Chisago and Goodhue counties. Only projects or sites with willing and interested landowners and that were located within the designated Focus Areas were to be funded for purchase or for conservation easements. As a part of this program, wildlife corridor areas were mapped for Chisago County as shown on the map on page 2-31.



Chisago County 2011 Land Cover



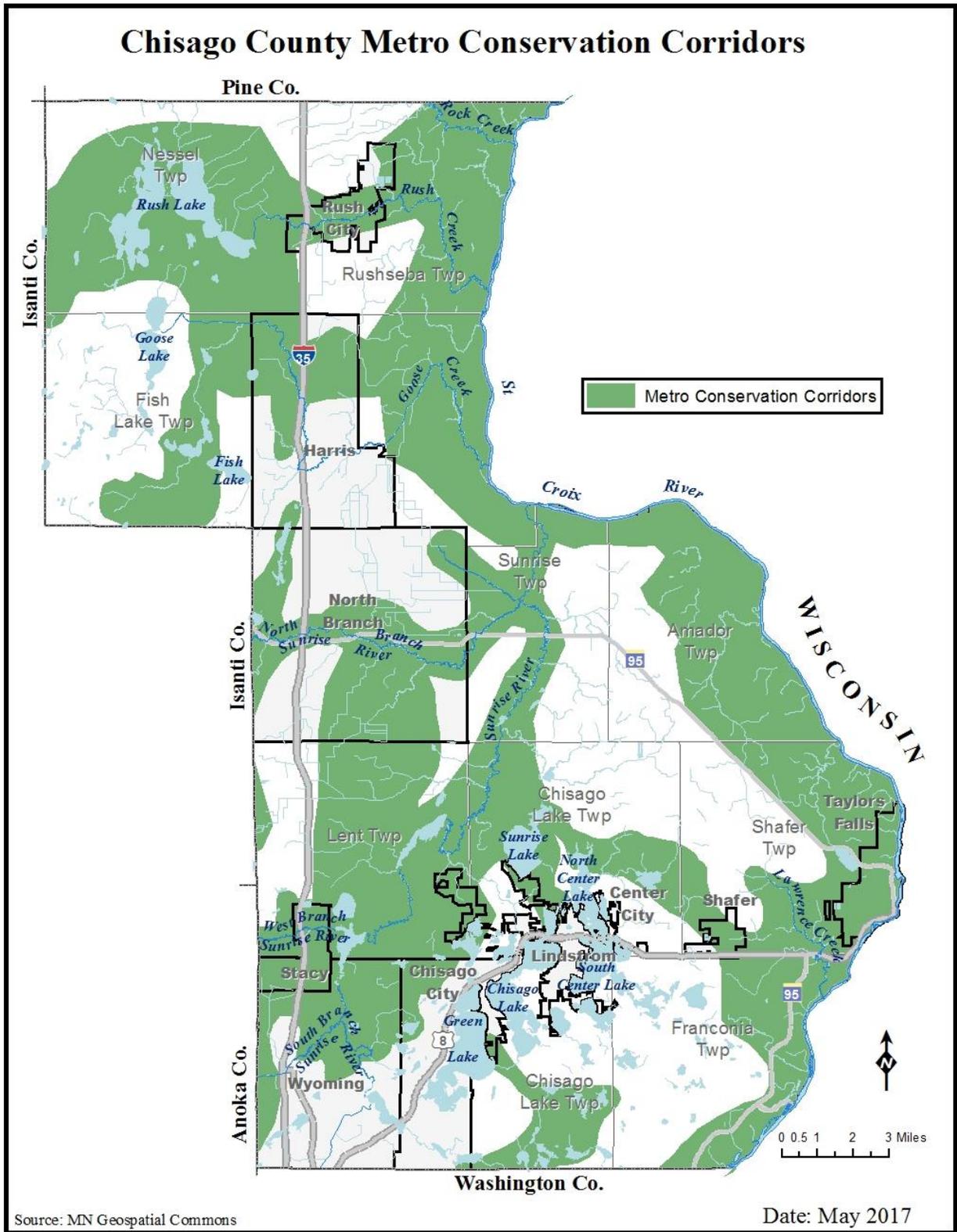
Chisago County Potential Wildlife Corridors



Source: DNR

Date: May 2017

Chisago County Metro Conservation Corridors



Another program that was intended to preserve natural and wildlife areas in the region was the Metro Conservation Corridors project that included the DNR Metro Greenways Program. This program ran from 1998 to 2011 with the goals of planning, protecting, restoring and reconnecting remaining natural areas in the Twin Cities greater (12-county) metropolitan region into a web of natural lands. The strategies used by this program included providing competitive grants to restore degraded habitats, grants to support the acquisition of important parcels of habitat, incentive grants to local governments to address conservation needs and natural resource based workshops. During the term of this program, the restoration and protection projects conserved an additional 375 total acres in the 12-county greater metropolitan region. In Chisago County, this included assisting Lindstrom with the purchase of 64 acres of land for Allemansratt Wilderness Park in 2010.

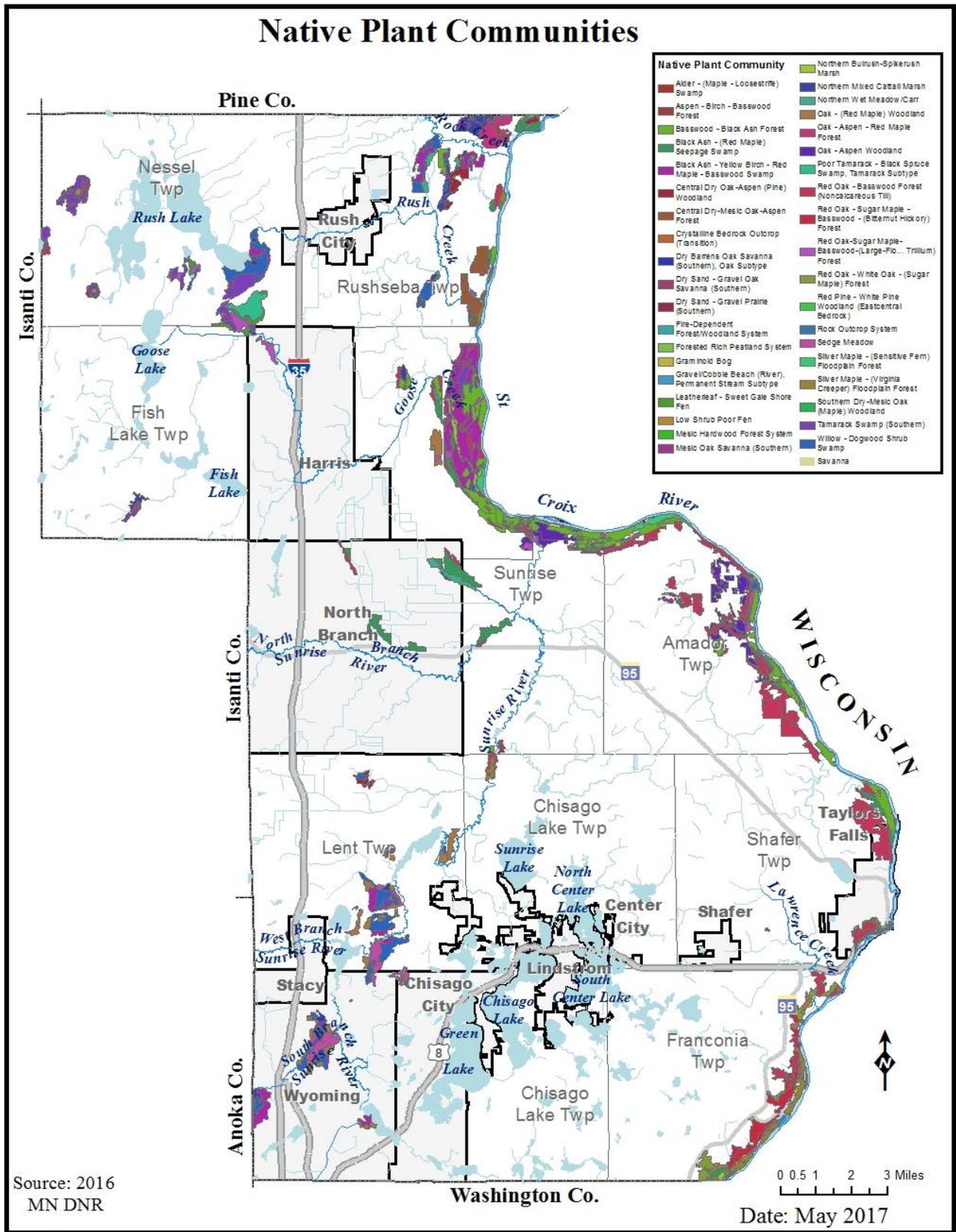
Native Plant Communities, Rare Species and Sites of Biotic Communities

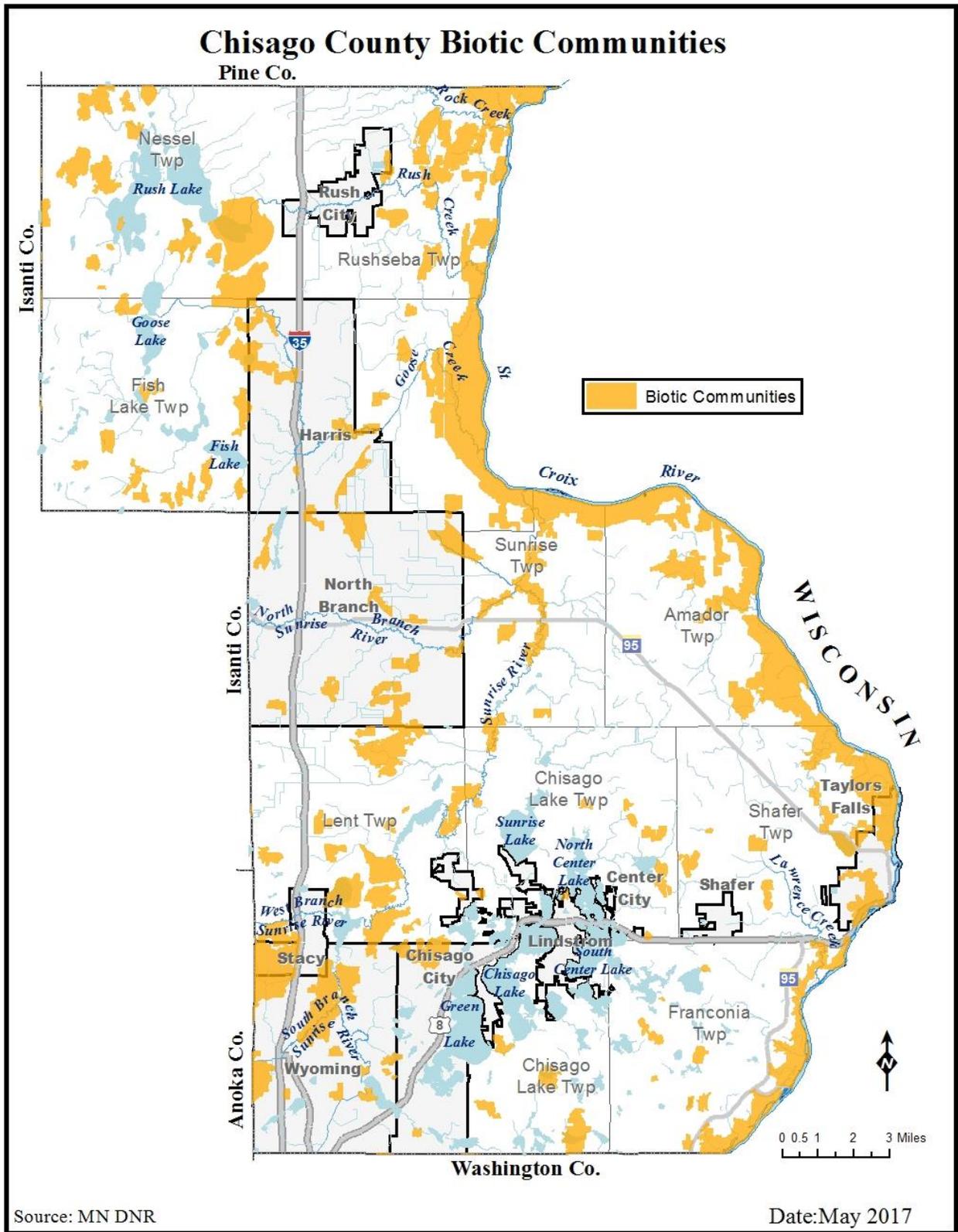
Little of Chisago County remains as it existed before settlement. Because of human activities such as logging, farming and development, most of the native vegetation in the County has been altered or replaced with domesticated plants. The few areas that still have their original vegetative characteristics are small and widely scattered throughout the County. Other important native vegetation exists in small remnants of native prairie, undisturbed biotic communities and in a variety of wetland areas such as fens, marshes, swamps and bogs. Restoration efforts are increasing and many prairies and forests are being restored on public and private lands.

The Minnesota County Biological Survey (MCBS) began in 1987 as a systematic survey of rare biological features. The goal of the survey is to identify significant natural areas and to collect and interpret data on the distribution and ecology of rare plants, rare animals, and native plant communities. Native habitats surveyed by MCBS contribute to a sustainable economy and society because they:

- Provide reservoirs of genetic materials potentially useful in agriculture, medicine, and industry.
- Provide ecological services that contribute to the quality of air, soil, and water.
- Provide opportunities for research and monitoring on landscapes, native plant communities, plants, animals and their relationships within the range of natural variation.
- Serve as benchmarks for comparison of the effects of resource management activities.
- Are part of natural ecosystems that represent Minnesota's natural heritage and are sources of recreation, beauty and inspiration.

A site of biodiversity significance, native plant, biotic communities and rare species mapping has been conducted by the Department of Natural Resources for Chisago County. See the maps of these on pages 2-34 and 2-35.





More recently, the Minnesota Department of Natural Resources (DNR) has identified and mapped significant natural areas throughout the state. With this information, they created the Natural Heritage Information System (NHIS). The NHIS provides information on rare plants, animals and natural features, native plant communities, biotic communities and other rare features. This database is the most complete source of data on Minnesota's rare or otherwise significant species, native plant communities and other natural features.

The County will strive to protect important and significant natural features during the development review and approval process. Landowners and developers are encouraged to avoid developing important natural features when platting and developing land. If such areas cannot be avoided, the County encourages developers and builders to use best management practices to mitigate the potential damage. Sites noted by the DNR in NHIS database are given the highest priority for avoidance.

Aggregate and Mineral Resources

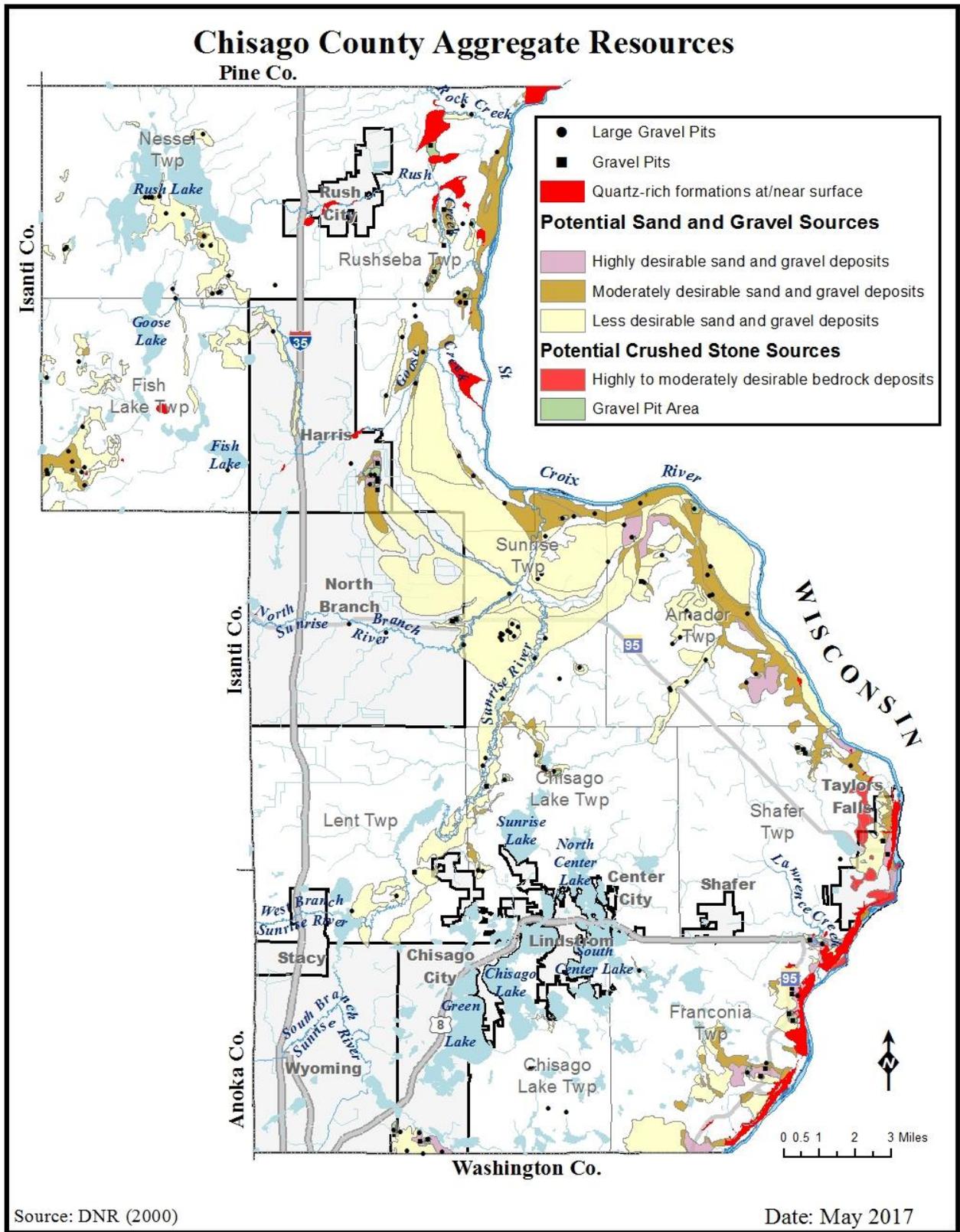
Aggregate (gravel and crushed rock) is another resource vital to the county and the area. Chisago County has been a major provider of these resources for the region. Regional transportation systems and the building industry need large volumes of aggregate for construction and maintenance. The local availability of aggregate helps reduce construction costs for roads, bridges and housing. Because aggregate is a limited resource, it is essential to avoid building over the prime deposits of aggregate until after it has been removed from the ground. Policies that are supportive toward aggregate mining and production of concrete and asphalt products are needed to meet the future needs of the county.

There is a need to provide for economic viability, removal and processing of sand, gravel, rock, soil and other aggregate materials vital to the economic well-being of the region while protecting adjacent land uses and natural resources against adverse impacts. The County will work with landowners and local communities to reserve enough potentially productive aggregate areas from development to meet the long-term regional needs. All mining is to be conducted in accordance with the provisions of the Chisago County ordinances to provide for the orderly, economic and safe removal and processing of sand, gravel, rock and soil including the reclamation of mined sites.

In 1993 the Minnesota Department of Natural Resources – Division of Minerals conducted a compendium of Mineral Resource Information for East-Central Minnesota. This study was conducted with assistance from the University of Minnesota and Minnesota Geological Survey and involved mapping of aggregate endowment in which there is a reasonable probability of discovering and developing economically viable aggregate deposits. The gravel pits, sand and gravel resources and crushed stone resources in Chisago County are shown on the map page 2-37. The 2010 Geologic Atlas for Chisago County has the most accurate and up-to-date information about aggregate resources in the County.

Chisago County Aggregate Resources

Pine Co.



Solid Waste

A sustainable county seeks a better quality of life for current and future residents by maintaining the environment's ability to function over time. It minimizes waste, prevents pollution, promotes efficiency and develops resources to revitalize local economies. Chisago County's integrated solid waste management system is a component of the infrastructure of a sustainable community. Therefore, solid waste will be managed by technologies and methods that support sustainable communities and environments. The amount of residential and business waste generated in the county is increasing with population and business growth. This increased amount of waste in the county is being managed by following the Minnesota waste hierarchy methods of:

- Waste reduction and reuse
- Waste recycling
- Composting yard and food waste
- Resource recovery (through waste to energy)
- Land disposal with methane recovery
- Land filling

The Chisago County Integrated Solid Waste Management Master Plan has established a goal of meeting the statutory solid waste recycling rate of 35 percent.

Chisago County has no municipal solid waste or industrial solid waste landfills within its boundaries for disposal of residential and commercial solid waste. The County is a member of the East Central Solid Waste Commission (ECSWC) that operates a large municipal solid waste management facility (landfill with methane recovery) in Mora. Since 1990, the county has enacted policies that support managing waste in an integrated system that includes waste reduction, reuse, recycling and resource recovery. Chisago County imposes a county waste management fee on every property that supports county efforts to promote recycling, reduce waste and protect soil and water against waste contamination. The County also operates a Household Hazardous Waste Facility in North Branch for residents to dispose of hazardous waste in an environmentally responsible way.

There are several private recycling facilities in Chisago County that process curbside recycling and/or problem materials (appliances, tires, electronics and mattresses). In addition, there is a privately owned and operated construction and demolition landfill located just east of Rush City.

Natural Resources Goals & Policies:

Goal: Encourage the conservation, enhancement, preservation and restoration of natural resources in the County for use and enjoyment of present and future generations and to serve as an economic development and tourism tool and asset for the County.

Policies:

1. Establish minimum lot sizes, development densities and standards to protect environmentally sensitive areas (ESA's). ESA's shall be defined as higher quality terrestrial and wetland habitats (including ephemeral wetlands); aquatic habitat such as trout streams, natural environment lakes, floodplains, and wild and scenic rivers; slopes over 18% and areas with high surface and ground water mixing rates.
2. Prohibit or severely restrict development on floodplains, steep slopes (18% or greater), wetlands, riparian corridors and other environmentally sensitive areas.
3. Identify and protect sand and gravel deposits for future use.
4. The County should identify tension points between natural resource protections and development pressures and adopt land use, planning and zoning strategies for protecting natural resources and for lessening the impacts of development on natural resources.
5. The County will encourage local governments to incorporate sustainable principles (including renewable energy) into local plans, ordinances, contracts, purchasing, construction projects and review processes.
6. The County will encourage local governments to design and locate new development in a way that preserves and benefits from the natural environment and reduces development pressures that endanger natural resources.
7. Chisago County will lead by example in county operations to conserve energy and the use of renewable energy sources in a cost effective manner. This will include incorporating energy conservation into existing and new buildings.
8. The County will manage waste through an integrated waste management system in accordance with the state hierarchy of waste reduction, reuse, recycling and resource recovery in order to minimize land filling. Chisago County will use coordination, cooperation and collaboration to educate about sound environmental practices related to waste management activities.
9. The County will lead by example in county operations and develop and implement innovative waste management solutions and will encourage other entities to do the same.

Goal: Development shall conform to natural limitations of topography and soil to create the least potential for soil erosion and development on slopes.

Policies:

1. Plats will require dedication of drainage easements and ponding areas.
2. Plats will require minimum buildable areas in addition to minimum lot sizes.
3. Regulations will be established restricting development on steep slopes and unstable soils.
4. Development of specific sites shall incorporate appropriate water management practices that minimize runoff and transport of sediments and nutrients, including, but not limited to, the use of temporary and permanent sediment/retention ponds, avoidance of steep slopes, vegetated buffers, natural infiltration areas and vegetated stream corridors. The use of newly constructed ponds will be required to meet the current design standards of best management practices of the State and the County for storm water management. Individual site plans shall be designed and constructed to reduce post development runoff to meet or exceed pre-development conditions.
5. Encourage and promote the use of vegetated buffers and rain gardens to help control storm water and to improve water quality.
6. The County will consider natural resource conservation in all land planning decisions. This should include avoiding environmentally sensitive natural areas when approving new subdivisions and using best management practices to lessen the damage to native plant communities and other important natural areas when developments are reviewed by the county.

Goal: Protect surface waters, groundwater, ditches and wetlands to promote recreational and tourism opportunities, aesthetic qualities, natural habitats and groundwater recharge.

Policies:

1. Delineate wetlands.
2. Achieve no-net-loss of the quantity and quality of wetlands in accordance with the Minnesota Wetland Conservation Act. This will include avoiding wetland impacts, where feasible, in accordance with the Minnesota Wetland Conservation Act and County standards. If avoidance is not possible, mitigate wetland impacts in accordance with the Minnesota Wetland Conservation Act and by County standards.
3. Density increases shall be allocated based on use of clustering of building sites that preserve natural features (mature woodlands, wetlands, natural prairie, steep slopes, native plant communities); maintain a percentage of common open spaces; minimize grading and filling of natural topography; utilize best management stormwater management practices that protect lakes, streams and wetlands; and minimize fragmentation of wildlife corridors by integrating open space of adjacent developments/property.
4. Enforce Minnesota Rules Chapter 7080 relating to Individual Sewage Treatment Systems and Minnesota Rules Chapter 8420 relating to wetlands.

5. Continue to support a coordinated, multifaceted approach to managing subsurface sewage treatment systems (SSTS); including:
 - Research, education and regulation in accordance with state rules.
 - The County continuing to regulate the location, design, installation, use and maintenance of SSTS and community treatment systems to prevent contamination of surface and groundwater.
 - The County amending its SSTS ordinance as may be necessary to be consistent with changes in state rules.
6. Lakes should be protected by measures such as increased setbacks for buildings and other structures.
7. The County will protect shoreland areas in order to maintain natural habitat and water quality. This means continuing to regulate land use within the designated shoreland areas of lakes and rivers in the unincorporated areas of the County in accordance with the standards in the County Zoning and Shoreland Ordinances.
8. As a condition of issuance of certain permits, conditional uses and variances, measures shall be required to mitigate the effects of development, nonconforming structures or uses in shoreland areas. (i.e. ISTS evaluation and upgrade, restoration of native vegetation buffer in shoreland impact zone and bluff impact zone, removal of nonconforming accessory structures, and/or consolidation of docks and mooring facilities if applicable).
9. Establish regulations requiring structure and sewage treatment system setback from wetlands.
10. Natural drainage will be used to the extent possible for storage and flow of runoff. Wetlands should be used as natural discharge areas. Presettling of runoff will be required prior to discharge to wetlands.
11. The County will require developers and contractors to follow an erosion control plan that provides preventive measures for erosion and sedimentation for proposed development and follow-up that those plans are being implemented.
12. Activities on wet soils and high water table areas will be regulated through the County Zoning Ordinance.
13. The county will protect, land, structures and natural communities from flooding that substantially exceeds natural water level fluctuations. This will occur by following or exceeding the standards and requirements in the County Floodplain regulations including preventing new building and limit the expansion of existing structures located in floodplains.
14. The county will amend its Floodplain Management regulations as may be required by the Federal Emergency Management Agency (FEMA) and Minnesota Rules.
15. Identify incentives to be offered for increasing awareness and utilization of low impact development methods to aid in reducing non-point source pollution.
16. The County will maintain, update and implement the goals and objectives of the Chisago County Local Water Management Plan to promote water sustainability, the preservation and protection of water resources.

17. The County will consider implementing the recommendations of the Chisago County Ditch work group, the objectives for drainage ditches as outlined in the Local Water Management Plan and those in the drainage ditch inventory report.
18. The County will promote the wise use of water through optimizing surface water and groundwater use, expanding water conservation and reuse, aquifer recharge and other best practices.
19. The County should incorporate water sustainability designs and standards in areas of County policy and actions, including overall development patterns, water management, transportation, housing and parks.
20. The County should work with regional and local partners to identify and plan County and local solutions to long-term water sustainability (resources and supply) that balance County and regional needs and local objectives.
21. The County will continue to encourage and support activities and programs to reduce nutrient loading to lakes, streams, rivers and the St. Croix River basin.

Goal: *Sand and gravel will be recognized as an important local and an increasingly desirable export commodity that is vital to the local economy.*

Policies:

1. Sand and gravel deposits shall be identified and protected for future use.
2. Educational information will be provided to raise public awareness of the fact that gravel is a natural resource that is essential for construction activities.
3. Provide incentives for preserving sand and gravel deposits from development in order to protect and utilize this essential construction material.
4. Require mining operators to restore depleted mining areas to an approved topography, a natural state or built environment.
5. The County will continue to enforce performance standards for mineral extraction operations within the County Zoning Ordinance to preserve the materials for extraction and to lessen impacts to the environment and adjacent land uses.

Goal: *Recognize, preserve and enhance the significance of the St. Croix River, which has been identified as a national Wild and Scenic River.*

Policies:

1. The County will continue to include the Upper and Lower St. Croix Overlay District regulations as required by State Statute.
2. Determine incentives for promoting the transfer of development rights in sending areas adjacent to the St. Croix Riverway Valley.
3. The County will support the goals identified in the St. Croix River Total Maximum Daily Load study and Water Resource Protection and Restoration Plan.

Goal: Prime scenic views and historic landscapes will be recognized as an important local amenity and a desirable local amenity drawing outside revenue from visitors that is vital to the local economy.

Policies:

1. Identify and protect the quality of visitor experience of prime scenic features, areas of exceptional rural ambience, important historic sites and their surrounding settings and prime areas for flora study and wildlife viewing and public spaces open to low-impact outdoors recreation.

Goal: Protect woodlands to promote recreational opportunities, natural habitat, aesthetic qualities, ground water recharge, screening, windbreaks, sound barriers and a source of wood products.

Policies:

1. Continue to support woodland preservation standards of: 1) structures shall be located in a manner that preserves the maximum number of quality trees; 2) forestation, reforestation or landscaping shall utilize a variety of tree species and shall not utilize any species susceptible to disease; and 3) Land development, including grading and contouring, shall take place in such a manner that remaining trees are minimally affected.
2. Development shall be required to be conducted in such a manner as to cause the least disturbance to woodland ecosystems.

In addition to the above mentioned natural resources goals and policies, the entire Chisago County Local Water Management Plan 2013 – 2023 goals and policies and the Priority Concerns Scoping Document shall be considered a part of this Comprehensive Plan update. Following is the purpose, vision and mission statements, goals, priority concerns from the County Local Water Management Plan:

Purpose

The purpose of the Chisago County Local Water Management Plan is to set County watershed priorities. The County will use these priorities to obtain and use resources to protect, improve, and conserve water resources in Chisago County including lakes, rivers, wetlands, and groundwater.

The Local Water Management Act of Minnesota (Minn. Stat. 103B.301 to 103B.355) states that the following guidelines will be met in this document:

1. The plan must cover the entire county.
2. The plan must address problems in the context of watershed units and groundwater systems.
3. The plan must be based upon principles of sound hydrologic management of water, effective environmental protection, and efficient management.

4. The plan must be consistent with local water management plans prepared by counties and watershed management organizations wholly or partially within a single watershed unit or groundwater system.
5. The plan must cover a five or ten-year period. Chisago County has decided to develop a plan that will address the concerns of Chisago County for the next 10 years (2013-2023). The Implementation Plan will focus on 2013-2018.

Vision

Surface and groundwater quality and quantity in Chisago County is preserved, protected, restored, and enhanced for current and future generations.

Mission of the Water Plan Policy Team

Develop, update, and oversee implementation of the Chisago County Water Plan.

Priority Concerns to be Addressed

The following Priority Concerns have been adopted by the Chisago County Local Water Management Plan (2013-2023) and are addressed in this plan:

- To protect the quality and quantity of groundwater used for drinking water.
- The introduction or spread of aquatic invasive species and their negative effect on water quality, navigation, recreation, or fisheries.
- Septic systems that are failing, noncompliant, or an Imminent Threat to Public Health.
- The influence of agricultural, rural, and urban land use practices on water quality.
- That citizens and elected officials receive accurate and understandable information to make informed decisions.
- To obtain sufficient resources to achieve goals established in the Water Plan.

These priority concerns are the basis for the goals and objectives included in the Chisago County Local Water Management Plan.

CULTURAL RESOURCES ELEMENT

September 2017



**Chisago County Comprehensive Plan
2017**

Cultural Resources

Cultural resources can include historic districts, buildings, structures, sites, public works, transportation corridors, archaeological sites, heritage areas, cultural landscapes, objects and related built forms. Historic buildings, neighborhoods and landscapes embody the intentions, assumptions and lives of those who built, lived, or worked in them. They have stories to tell about what the community was and how it became what it is, and that help us understand who we are. Preserving those stories can be an important part of building a healthy community. Planning and preservation work hand in hand to ensure the conservation and preservation of cultural resources such as historic buildings, housing, economic development, protection of historic landscapes and the preservation and growth management of villages and the conservation of farmland. When a city or county plans ahead to preserve a historic property, site or district before other decisions have been reached, there is a greater likelihood of success.

In an era of profound change, the threat to non-renewable historic resources is accelerating, requiring innovative planning solutions. According to the American Planning Association, these threats include:

- Diminishing funding for preservation at the federal and state levels.
- The impact of transportation projects on cultural resources.
- The private property rights movement and its attack on preservation programs.
- Development resulting in either demolition or retention only of building facades.
- Ignorance of archaeological resources.
- Subordination of historic preservation to other design concerns.

Why Encourage Historic Preservation?

- It preserves the historic, architectural and aesthetic character and heritage of a community or area and helps to provide a sense of place and continuity. As sprawl and roadside development make more and more places look the same, it becomes important for communities to keep their identities intact. Even one or two striking historic buildings can help to define a community and hint at its past. If whole neighborhoods or rural areas can be preserved, the effect is that much greater. The sense of history can contribute to community pride and to a better understanding of the present.
- It can add character and/or charm to a community and emphasize its uniqueness. The preservation of old buildings, neighborhoods and landscapes can determine the look of a community and may be an attraction for tourists as well. If these elements are historically significant or unusual, they can be a source of community pride and lead to other improvements.

Why Preserve?

Preserving important aspects of our past gives us a sense of continuity and meaning. Historic preservation efforts also can foster community pride. In addition to maintaining a community's distinctive character, cultural resource preservation also can lead to tangible economic benefits. This could include increased tourism by retaining and emphasizing the historic heritage of the city or county. An example of this are the novels written by Vilhelm Moberg about Swedish life and heritage in the Chisago Lakes area.

Remnants of the early history of Chisago County are fast disappearing. There is little evidence left of the earliest known history, as only one Indian mound is still visible, although others may exist. About the only evidence left of the later Indian inhabitants is the fact that Indian names are still in use, including the name of the county and some of the lakes and streams.

The fur-trading era has left few identifiable signs, and the logging era has fared little better. The Folsom House in Taylors Falls is a reminder of the logging years. Nevers Dam was removed in 1955, and there is little at the site now to tell the story of this phase of the county's history to visitors in the area.

The heritage of the early settlers can best be seen in the small farms, villages, and rural churches that dot the county. Much of the early transportation systems devised by these settlers have survived, with few modifications. Some artifacts of this era have been preserved, but many have been lost through the years.

It is this total heritage, which has created the type of environment that holds an appeal for residents and newcomers that are drawn to the rural atmosphere. As Chisago County grows, many of these qualities may be destroyed unless careful planning and consideration is used in governing this growth. City and county planning commissions are a key factor in the determination of what should be preserved in Chisago County, and zoning is a useful tool in this respect.

Who Should Encourage Historic Preservation?

Several people might have an interest in encouraging historic preservation:

- Public officials and planners. Whether for economic or social reason, those who make public policy have an interest in preserving community history and seeing historic resources as a community asset.
- Owners of historic properties, including developers, businesses, industries, and individual homeowners.
- Community developers. Historic properties can bring economic benefits and can serve to start a turnaround in fortunes of a community.

- Those likely to benefit from tourism. If historic preservation attracts tourists, then those who serve them – hotels, bed and breakfasts, restaurant, museums, shops, fuel stations – stand to benefit.
- The business community. Anything that draws people to the community, increases community pride and satisfaction, creates jobs or increase investment is good for business.
- History buffs. These are the people who are fascinated by history and who find historic properties important in and of themselves for the window they open into the past.

How Do You Encourage Historic Preservation?

There are several measures that communities and individuals can take to encourage historic preservation: providing incentives, imposing regulations, providing help and support to those engaged in preservation and for preservation itself, educating the public and engaging in advocacy.

Incentives – An incentive is a benefit given to someone in order to encourage him to do something specific. There are several kinds of incentives that can be used to encourage historic preservation. Most incentives are cost related and include tax incentives (credits, deductions and abatements). Other incentives include permit waivers, exceptions to certain regulations and density bonuses.

Grants and loans – All levels of government and private organizations and foundations offer grants for various kinds of preservation activities, or for the preservation of specific kinds of structures or properties.

Regulations - If incentives are the carrot, regulations are the stick that can help convince developers and other to preserve historic properties. Often the two are used together in order to ensure preservation that is appropriate and competent.

Help and Support – There are several kinds of help and support for historic preservation that do not involve money directly. Communities, organizations and individuals can offer time, labor and other commodities to ease the preservation process. These can range from technical assistance, help with bureaucratic filings and issues and community volunteers.

Public Education

An important part of encouraging historic preservation is educating the public about its importance. If a majority, or even a large minority, of a community's citizens are committed to preservation, the chances are that it will become an integral part of the community's planning.

Gaining that commitment means getting information out in ways that people are likely to pay attention to. The more different ways an idea can be presented, and the more different channels that can be used to spread it, the larger the number of people that will become aware of and respond to it.

Advocacy

Every one of the activities suggested to encourage historic preservation will take some kind of advocacy. Those that depend on government – most incentives and all regulations – have to be translated into policy and often into law. This means convincing policy makers and/or lawmakers at some level, whether local, county, State or U.S. Congress, that historic preservation is necessary and that measures for protection are likely to be effective.

Preservation

Historic preservation efforts are strongest when they begin at the local level. Policy makers and residents considering historic preservation often have several questions about such activities. These may include:

How do you preserve historic buildings while encouraging growth?

How do you create programs that foster appropriate planning and development?

Are there sources of funding for preservation activities?

Participation in the Certified Local Government Program (CLG) is a way for a community to get professional guidance and support to help shape its future. The CLG Program was established through 1980 and 1992 amendments to the National Historic Preservation Act of 1966. The CLG is a cost-effective local, state and federal partnership that is available to help local communities with historical preservation. CLG supports and strengthens local preservation activities by assisting communities to achieve their preservation goals through the development of an action plan. It is a nationwide initiative that directly links a community's preservation goals to state and federal preservation programs. This program is a major source of support and guidance for local communities by providing technical assistance and grants to local governments that are committed to protecting their historic and architectural heritage for future generations.

Local government can benefit from becoming a CLG in many ways. Certified Local Governments receive technical assistance and services from the Minnesota Historic Preservation Office. Training sessions for historic zoning commissioners and staff persons can held on-site. Communities that are part of the CLG program benefit from technical assistance, training and networking opportunities.

A Certified Local Government has several responsibilities as part of the program. These include:

- Establishing and maintaining a qualified Historical Preservation Commission.
- Maintaining a system for identifying historic properties.
- Enforcing appropriate legislation for the designation and protection of historic properties.
- Providing for public participation in the local preservation program.
- Playing an expanded role in nominating properties to the National Register.
- Performing other agreed-upon functions delegated by the State Historic Preservation Office.

County and regional land-use decisions about transportation, zoning and subdivisions have direct and indirect effects on local efforts to preserve historic buildings, archaeological sites or entire historic downtowns. To achieve the maximum possible integration of preservation and planning, cities and counties should use a range of preservation techniques and options. This means:

- At all levels of government, there is a need to work with the private sector, independent organizations and citizens to increase awareness of, and to acknowledge, protect and/or enhance historic resources.
- Communities and residents need to be encouraged to recognize the value of historic resources as major contributors to the quality of life and to cultural vitality, and as resources that both remind us about our past and provide stimulus to economic vitality and the potential for tourism.
- Including preservation goals and policies into comprehensive plans and reconciling and coordinating preservation policies with zoning and development policies and regulations.
- Local governments should recognize that neighborhoods are dynamic objects that evolve rather than remain fixed in time; therefore, they should support preservation strategies that respect the heritage, context, design and scale of older neighborhoods while recognizing the evolution of those neighborhoods' built form.

The Minnesota Historical Society has designated four historical sites in Taylors Falls. It is probable that other sites throughout the county should be identified and preserved. The Chisago County Historical Society has collected, cataloged and documented some early artifacts and should be encouraged to add to their collection.

As the County continues to grow and develop, there is concern for three cultural resources in particular: archaeological properties, rural and agricultural heritage and historic landscapes. Increased road and housing developments, as well as direct and indirect impacts can affect all of these types of resources. It is the intent of this chapter

to identify areas of significant cultural and historical resource value not to stop growth from occurring in areas where significant cultural resources are located but to identify incentives for development to occur in such a manner that the cultural resources are preserved.

As Chisago County continues to experience growth pressure throughout the County, preserving the area's history will become increasingly important. The preservation of historical resources is significant in developing and enhancing the county's identity and remembering past heritage. Chisago County recognizes the importance in preserving the history and traditions of the area. Historical areas in need of preservation have been identified and continue to be discovered throughout the County. Areas in need of preservation include a variety of types ranging from buildings to cemeteries.

Historical Associations in Chisago County

There are a number of available organizations in Chisago County aiding in providing communities with a sense of their historical place. The following is a list of active historical organizations in Chisago County:

1. Minnesota Historical Society
2. Chisago County Historical Society
3. Taylors Falls Historical Society
4. Taylors Falls Heritage Preservation Commission
5. Lindstrom Historical Society
6. Amador Heritage Center
7. North Chisago Historical Society
8. Center City Heritage Preservation Commission
9. Wyoming Area Historical Society
10. Iron Horse Central Railroad Museum
11. Wild River State Park
12. Interstate State Park

National Register of Historic Places

The Minnesota Historical Society maintains a list of all Minnesota properties included in the National Register of Historic Places. The following is a list of those locations located in Chisago County that are included on the registry (as of a search of the National Register of Historic Places conducted on July 14, 2016):



*Anderson, Gustaf, House (added 1980 - Building - #80002000)
Formerly known as Chisago County Historical Society, 13045 Lake Blvd., Lindstrom*



*Angel's Hill Historic District ** (added 1972 - District - #72000675)
Also known as Angel's Hill
Roughly bounded by Military Rd., Mill, Mulberry and Government Sts., Taylors Falls*

*Archeological Site No. 21CH23 (added 1989 - Site - #88003129)
Also known as 21CH23
Address Restricted, Taylors Falls - Amador Township*



*Carlson, J. C., House (added 1980 - Building - #80002004)
Bremer and 6th Sts., Rush City*

*Center City Historic District (added 1980 - District - #80001996)
Summit Ave., Center City*



*Daubney, John, House (added 1980 - Building - #80002008)
Oak and River Sts., Taylors Falls*



*Franconia Historic District (added 1980 - District - #80000406)
Roughly Cornelian, Summer and Henry Sts., Taylors Falls*



*Grant House (added 1980 - Building - #80002005)
4th St. and Bremer, Rush City*



*Interstate State Park CCC/WPA/Rustic Style
Campground ** (added 1992 - District - #92000638)
Also known as Interstate State Park
Off US 8 SW of Taylors Falls, Shafer Township,
Taylors Falls*



*Interstate State Park WPA/Rustic Style Historic District (added 1992 - District - #89001664)
Also known as Interstate State Park
Off US 8, Taylors Falls*



*Larson, Frank A., House (added 1980 - Building - #80002001)
Also known as Fridhem
Newell Ave., Lindstrom*

*Moody Barn (added 1980 - Building - #80001998)
Co. Hwy. 24, Chisago City*

*Munch, Paul, House ** (added 1976 - Building - #76001050)
Summer St., Taylors Falls*



*Munich-Roos House ** (added 1970-Building- #70000289)
Also known as Roos House
360 Bench St., Taylors Falls*

*Point Douglas to Superior Military Road: Deer Creek Section ** (added 1991 - Structure - #90002200)
Also known as Point Douglas to St. Louis River Road
Off Co. Hwy. 16, St. Croix Wild River State Park, Amador Twp., Taylors Falls*



*Sayer House (added 1980 - Building - #80002002)
Co. Hwys. 30 and 9, Harris
Also known as: George Flanders House*



*Taylors Falls Public Library
(added 1970 - Building - #70000290)
417 Bench St., Taylors Falls*



*Victor, Charles A., House (added 1980 - Building - #80002003)
30495 Park St., Lindstrom*

In addition to the historical sites listed above, there are many locations of cultural interest in Chisago County. They include:

Almelund Threshing Company – 17760 St. Croix Trail, Taylors Falls

They host a threshing, vintage farming and classic tractor festival annually over one weekend in August. The event also includes an antique show and a flea market.

Amador Heritage Center – 37475 Park Trail, Almelund

The museum was established in 1978 in a former two-room brick schoolhouse that also serves as the Amador Town Hall. The Friends of Amador Heritage Center maintain the site and they sponsor a community event, the Amador Apple Festival, the third Sunday of September each year to support the project. The society also owns a property with a Swedish Immigrant Log Farm. It has several vintage log cabins from the area and other vintage farm buildings that represent the early agricultural life in Chisago County.

Franconia Sculpture Park – 29815 Unity Avenue, Shafer (at the intersection of Highways 8 and 95)

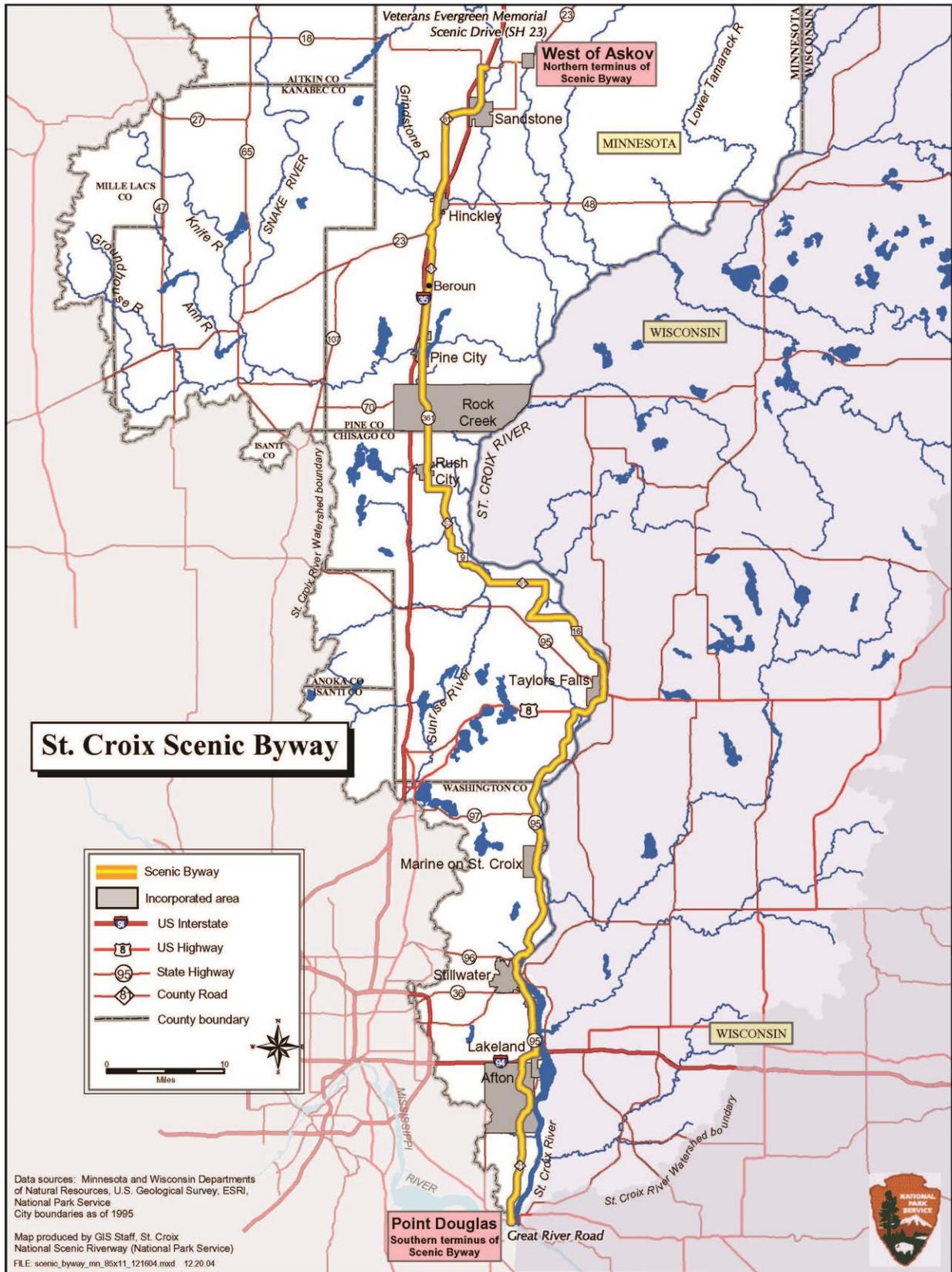
Founded in 1996, this site is a 43-acre outdoor sculpture park with active artist residency and community arts programming that serves more than 100,000 annual visitors.

Ironhorse Central Railroad Park – 24880 Morgan Avenue, Chisago City

The site has steam locomotives, other antique railroad equipment and a mile of track that surround a family picnic area.

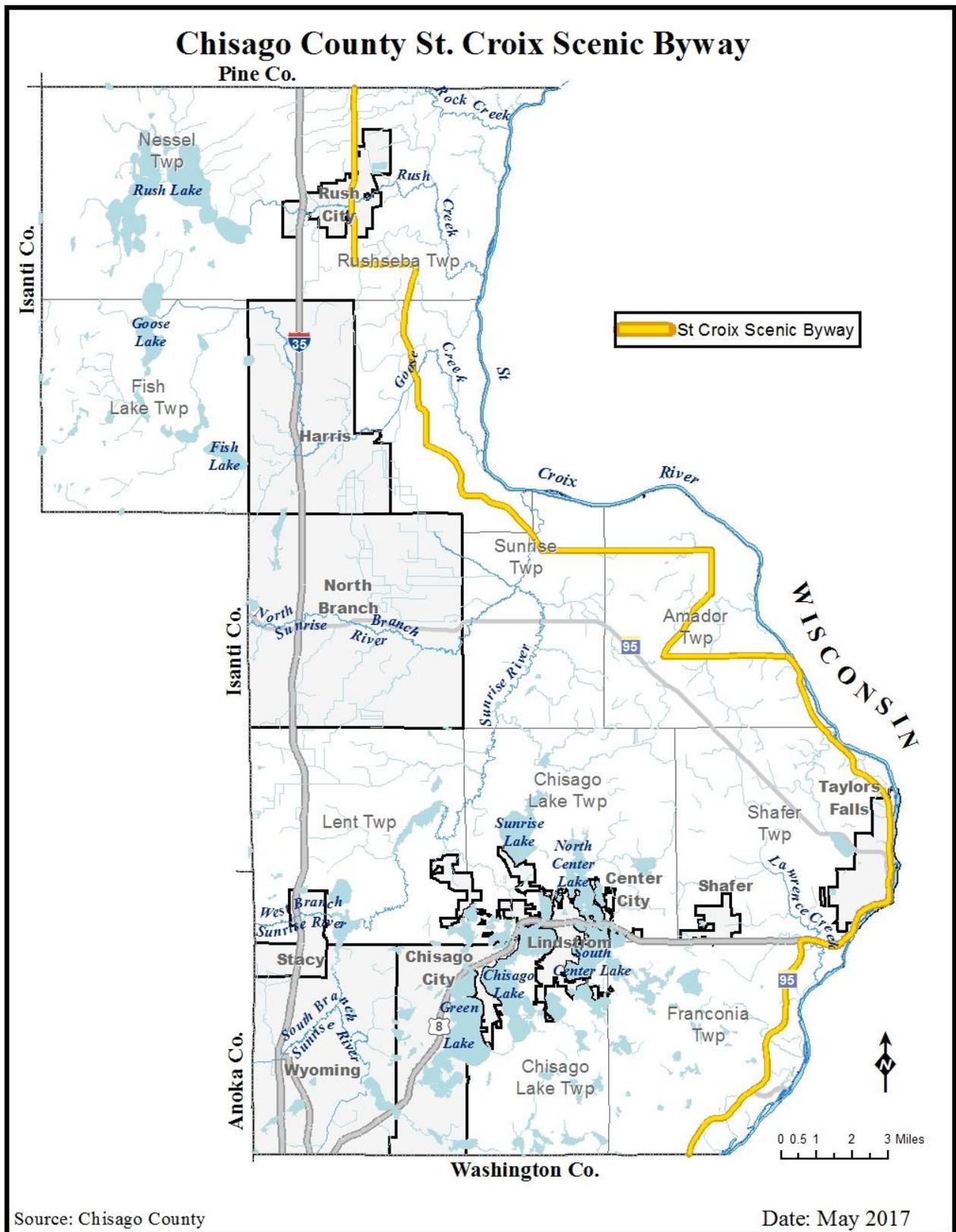
St. Croix Scenic Byway – This 124-mile byway follows a route established in 1855 between Point Douglas, Minnesota (in southern Washington County) and Superior, Wisconsin. Although intended as a highway for troop movement, the road also attracted earlier pioneer settlers and commercial traffic. In Chisago County, the route follows Highway 95 north from Washington County to Highway 8 into Taylors Falls. It then proceeds north from Taylors Falls along County Roads 16 and 12 (past Wild River State Park) to County Roads 81, 9 and 57 to Rush City. From Rush City the route continues north on County Road 30 (old Highway 61) into Pine County. The maps on pages 3-13 and 3-14 show the location of the St. Croix Scenic Byway. The website for the Byway document points of interest and sites to see along the entire route.

Cemeteries – The Chisago County Historical Society has put on-line records about all 42 cemeteries in the County. This information includes the name, location and a memorial for each known burial.



Chisago County St. Croix Scenic Byway

Pine Co.



Source: Chisago County

Date: May 2017

Century Farms

Minnesota's Century Farm program, coordinated by the Minnesota Farm Bureau and the Minnesota State Fair, honors the state's agricultural heritage and culture. Since 1976, this program has been a way of paying tribute to the significance of Minnesota's family farming traditions, both past and present. The program recognizes families who have owned their farms for at least 100 years and are currently involved in agricultural production of a 50-acre farm, or larger.

The following is a list of the century farms recognized in Chisago County since 1976 (as of July 14, 2016). (Note: The year in parenthesis is the year of original ownership by a member of that family.) The map on page 3-18 locates the century farms within the county.

1976	<i>None</i>
1977	<i>Eugene & Alice Anderson, Lindstrom (1853)</i>
1978	<i>Lloyd & Lois Colliander, Harris (1870)</i> <i>Alice Philip & Dale Hawkinson, Shafer (1869)</i>
1979	<i>Paul E.L Peterson, Chisago City (1869)</i>
1980	<i>Alfred Macheledt, Rush City (1873)</i>
1981	<i>Shirley Ann Harer Abrahamson, Rush City (1867)</i> <i>Chester A. Carlson, Lindstrom (1877)</i> <i>Glen G. & Elaine A. Danger, Braham (1880)</i> <i>Willard Nystrom, Rush City (1850)</i> <i>Lucille Mattson Peterson, Rush City (1870)</i>
1982	<i>Gilmore Boeck, Braham (1877)</i> <i>Filmore Johnson, Harris (1882)</i> <i>Ray W. & Doris E. Johnson, Taylors Falls (1880)</i> <i>Ray E. Rue & Myrtle Rue, Shafer (1882)</i>
1983	<i>Caleb W. Nelson, Harris (1881)</i> <i>Herman & Marie Rothenbacher, Rush City (1883)</i>
1984	<i>Bruce A. & Barbara J. Carlson, Rush City (1876)</i> <i>Rudolph Chester Peterson, Harris (1877)</i>
1985	<i>William A. Strelow, Braham (1876)</i> <i>Donald L. & Nancy L. Zachrison, Branch (1882)</i>
1986	<i>George P. & Harriet F. Peterson, Blaine (1884)</i>
1987	<i>Dale F. Sandberg, Taylors Falls (1884)</i> <i>Donald R. Wilcox, Harris (1885)</i>
1988	<i>Boyce Sunnycrest Farm, North Branch (1887)</i>
1989	<i>Allan & Carol Gustafson, North Branch (1888)</i>

- 1990 *Leland & Charlotte Herberg, Shafer (1889)*
Donald & Shirley Johnson, Center City (1878)
Alma (Mrs. Henry) Lendt, Wyoming (1870)
Wilbur Magnison, North Branch (1885)
Amanda McNeil, Maynard (1890)
Roger & Bernice Medin, Center City (1883)
G. Rodger & Marvin Nelson, Center City (1885)
Arlie & Mary Sederberg, North Branch (1890)
- 1991 *Leland & Charlotte Herberg, Shafer (1889)*
Nels Nelson, North Branch (1891)
Everett Larson, Harris (1890)
Wilbur Magnison, North Branch (1890)
Harold A. Nelson, North Branch (1885)
- 1992 *Joesph & Audrey Blom, Harris (1889)*
Mrs. Philip C. Johnson, Lindstrom (1892)
- 1993 *Sybrandt Century Farm, Harris (1872)*
- 1994 *Abner Swenson (Life Estate to Janice Shaffer), Chisago City (1894)*
- 1995 *Edna M. Goranson, Shafer (1895)*
- 1996 *None*
- 1997 *Harland & Goldie Carlson, North Branch (1885)*
Jeff Elsenpeter, Rush City (1894)
Loren & Marlene Peterson, Stacy (1885)
- 1998 *James Mattson, Harris (1989)*
- 1999 *None*
- 2000 *Mary Ruth Welshons Lelwica, Lindstrom (1857)*
- 2001 *Dennis and Christine Johnson, Rush City (1901)*
Orville and Lorraine Anderson, Harris (1895)
Harold Eklund, Stanchfield
John and Sandra Miller, Center City (1901)
- 2002 *Johnson Farm, North Branch (1902)*
Lulu M Jackson, Shafer (1902)
Harold & Yvonne Lund, Rush City (1902)
Craig Leon Mattson, Chisago City (1891)
- 2003 *Daniel & Valerie Anderson, North Branch (1891)*
Alan Holmgren, Chisago City (1903)
- 2004 *Delano and Barbara Olson, Harris*
- 2005 *James Carlborn, Harris*
- 2006 *Katherine Flynn and O. Craig Anderson, Chisago Lakes Twp.(1902)*

2007 *Leif Erickson, Harris (1884)*

2007 *Conrad Warner and Linnea Lofgren, Rush City (1889)*

2008 *Larson Family, Rush City (1901)*

2008 *Engdahl Family, North Branch (1902)*

2009 *Lofgren Family, Harris (1892)*

2009 *Lofgren Family, Rush City (1902)*

2010 *Johnson's Haven Farm, Rush City (1899)*

2011 *Hanson Family, Harris (1907)*

2011 *P.O. Lindberg, North Branch (1910)*

2012 *Johnson Family, Harris (1878)*

2013 *Johnson Family, Center City (1913)*

2013 *Carlson Family, Harris (1882)*

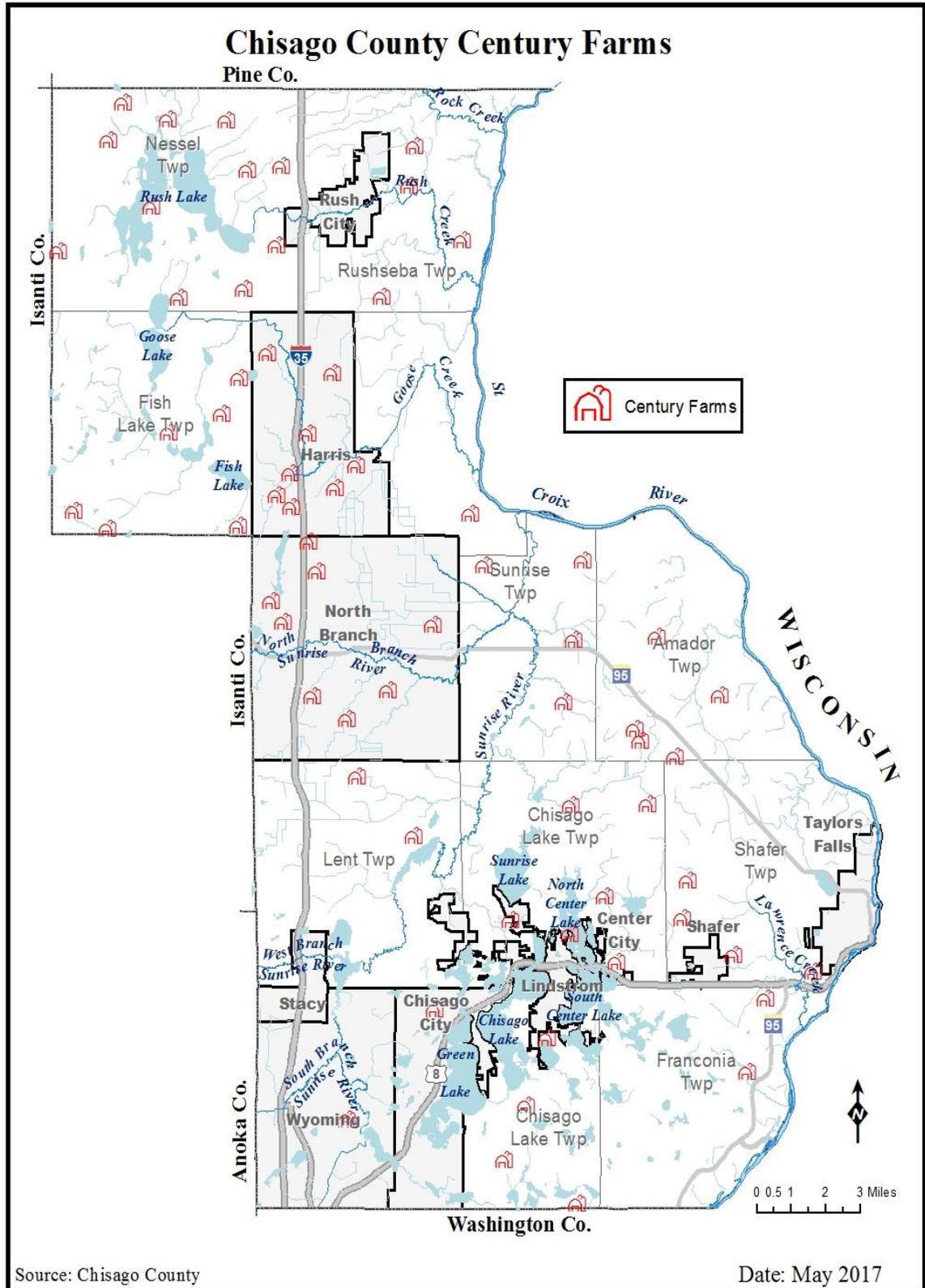
2013 *Andrews Family, Shafer (1913)*

2013 *Sundeen Family, Center City (1913)*

2013 *Oden-Lavin Family, Scandia (1913)*

2014 *Arnold and Joyce Johnson, Rush City (1914)*

2015 *Gustafson Family, Center City (1879)*



Cultural Resources Goals & Policies

Goal: *Chisago County will strive to maintain its rural character and historic resources while allowing for logical growth and development by:*

- 1) Encouraging the protection of valuable cultural and historical sites to preserve the County's sense of history; and**
- 2) Protecting, preserving and enhancing the County's significant scenic and archaeological sites.**

Policies:

1. Every effort shall be made to identify and protect historic sites that meet national, state and local criteria for historic designation from destruction and harmful alteration.
 - Local criteria shall be developed.
 - A comprehensive historic sites survey shall be conducted which identifies the resources of historic significance within the County.
 - Once a comprehensive list is established, an annual review shall be conducted.
2. Chisago County will encourage communities and residents to recognize the value of historic resources as major contributors to the quality of life and to cultural vitality, and as resources that both remind us about our past and provide stimulus to economic vitality and the potential for tourism.
3. The County should encourage local governments to recognize that neighborhoods are dynamic objects that evolve rather than remain fixed in time; therefore, they should support preservation strategies that respect the heritage, context, design and scale of older neighborhoods while recognizing the evolution of those neighborhoods' built form.
4. The County should encourage the private sector, independent organizations and citizens to increase their awareness of, and to protect and enhance historic resources.
5. Chisago County should encourage local communities to consider joining the Certified Local Government Program (CLG) to help with their local historic preservation activities.
6. The County shall encourage inter-jurisdictional cooperation to further the goals of historic and archaeological preservation.
7. The County shall further the goal of cultural resource preservation using primarily education and incentives.

8. The County should encourage local governments to include preservation goals and policies in their comprehensive plans and reconcile and coordinate preservation policies with local development policies and regulations.
9. Coordinate review of any developments that may have a potential to impact historical sites with affected communities and with the Chisago County Historical Society and the State Historical Society.
10. Billboard and off-premises sign regulations should continue to be implemented to prevent incompatibility with the rural character and scenic areas.

RECREATION & OPEN SPACE ELEMENT

September 2017



Chisago County Comprehensive Plan

2017

Recreation and Open Space

Introduction

The Recreation and Open Space Element of this Comprehensive Plan has two parts. The first part of this element (starting page 4-3), is adapted from the Chisago County Comprehensive Parks and Trails Plan adopted by the County Board in April 2016. The intent of this part of this element is to summarize the complete Comprehensive Parks and Trails Plan and shall be considered a part of this Comprehensive Plan. It includes a general description of the overall County park system, the vision and mission statements for the County parks and trails, goals and strategies developed from the 2016 Park plan update process, the executive summary from the 2016 Park Plan, Park and Trail Plan objectives, guiding principles of the plan and the plan direction.

The second part of this element, formerly known as Part B, (starting on page 4-16), is entitled Open Space and Development. This part of the Plan is to provide goals and policies relating to open space and development. It also gives a brief description of the current county systems in place to encourage open space protection (i.e., cluster development option and the transfer of development rights program). In addition, it includes a brief summary of the Green Corridor Study conducted in 1998-1999.

While the County Parks and Trails System and Open Space and Development are in separate parts of this element, both topics are interrelated and the goals, policies and strategies should be looked at as a whole to provide a complete recreation and open space program for Chisago County. Only through both parts working together can the goals and visions of the County be achieved.

RECREATION & OPEN SPACE ELEMENT Comprehensive Parks & Trails Plan

September 2017



Chisago County Comprehensive Plan 2017

Comprehensive Parks and Trails Plan

This portion of the Recreation and Open Space element is adapted from the Chisago County Comprehensive Parks and Trails Plan adopted by the County Board in April 2016. The intent of Part A of this element is to summarize the complete Comprehensive Parks and Trails Plan, which shall be considered a part of this plan. This information includes the purpose and vision for the plan, the executive summary, vision and key points, plan objectives, guiding principles and plan direction. For more detailed information, please refer the current Chisago County Comprehensive Parks and Trails Plan.

Purpose, Process & Community Vision

The County Board adopted the current Chisago County Comprehensive Park and Trails Plan in April 2016 as an update to plan adopted by the County in June 2002. The plan adopted by Chisago County in 2002 was developed with the input of the citizens of Chisago County through five community meetings and the input of the Chisago County Park Board, Parks Department Staff, Parks and Trail Plan Task Force, and local governmental representatives. Community representatives provided information about candidate sites for expansion and activities that should be provided.

The Comprehensive Parks and Trails Plan was developed to help ensure that the County has a plan for preserving, enhancing, and developing parks, trails and open space for present and future generations and to take into account the demands of the County's growing population, and the need to identify those special areas of the County that should be preserved for future generations.

More specifically, the 2016 plan update was developed to serve several purposes including the following:

PURPOSE OF THE 2016 COMPREHENSIVE PARKS AND TRAILS PLAN

The primary purpose of the Chisago County Parks and Trails Plan is to advance the County's vision and mission for the County parks and trail system. To help meet that purpose, the plan provides direction for land preservation, development and use of the various resources of the County's parks and trail system.

This plan includes narrative, goals and objectives to guide the County as it considers future park-related activities and opportunities over the next 10-20 years. The County Park Board and County staff work continually to refine its approach to diverse issues such as property acquisition, innovative funding approaches, facility maintenance and replacement strategies, operations, interjurisdictional coordination and sustainability. This plan describes the County's approach for addressing these and other issues by:

1. Documenting the existing system and the plan update process.

2. Presenting a Park System Concept that implements the vision and mission and builds on the County's past efforts.
3. Identifying future park, trail and facility needs as Chisago County grows and evolves.
4. Providing recommendations for each of the parks, trails and reserves.
5. Discussing approaches to operating and sustaining the system.
6. Providing criteria to prioritizing recommendations and projects in the coming years; and
7. Presenting an implementation plan.

2016 Comprehensive Parks and Trails Plan Executive Summary

The County park system plays an important role filling a niche between the smaller city parks and the larger state parks. Because of their size and dispersed locations, County parks showcase the diversity of the County's natural and cultural resources and meet the needs of a variety of populations. The county park system provides open space that preserves the county's unique and sensitive natural resources and provides recreational experiences not available by local, state or federal parks. The county park and open space system is meant to complement, not compete with or duplicate, facilities and services that other organizations provide. As the County plans for the next 20 or more years, key challenges lay ahead – constrained financial resources, new demands stemming from changing demographics, emerging environmental challenges and the increasing necessity of regional economic cooperation.

As part of the 2013-2015 plan update process, the County adopted newly refined vision and mission statements for the parks, trails and open space system. The County based these new statements on the current needs and goals for the parks and trails and from the original statements the County adopted in the 2002 Comprehensive Plan. Chisago County has adopted the following vision statement to guide future County park and trail acquisition, development and programming priorities:

VISION STATEMENT

"A park and trail system focusing on diverse natural resources and the recreational needs of Chisago County residents and visitors."

The Chisago County Parks and Trails System adds value to the lives of people in the County. The System contributes to the well-being of local and regional communities by providing public enjoyment and education while maintaining and restoring high quality natural areas. By virtue of its size, quality facilities, and dispersed locations, the County Parks, Trails and Open Space System provides a place for users to find solitude, green space, access to natural resources, clean water and a place to recreate.

The County also adopted the following mission statement for its parks, trails and open space system:

MISSION STATEMENT

“Protect the natural resources, balance the demand for recreation with the need for conservation, offer recreation opportunities that encourage healthy lifestyles and provide clean, safe and accessible places for leisure time activities.”

This Chisago County Parks and Trails Plan sets the overall goals and policies that guide the development of the county-controlled sites and facilities. Master plans provide more detailed information about the development plans for individual park and trail facilities.

The primary goal of the Comprehensive Parks, Trail and Open Space Plan is to preserve features of the county parks and trails for present and future uses. The plan:

1. Provides background information, policies, rationale and guidelines for making decisions about parks, trails and open space in Chisago County.
2. Charts a course for future acquisition and development of parks, trails and open space.
3. Clarifies the role of the County and others in providing parkland, recreation and open space.
4. Informs residents and others of the county’s plans for parks, trails and open space.
5. Provides capital improvement guidance for the County Parks. It serves as a budgetary tool to help direct spending requests and allocations, guiding annual work priorities and the scheduling and sequencing of projects.

Vision or Key Points

The following is a summary of some of the key points that emerged from the development of this plan update:

1. Parks and trails can be a major contributor in addressing major social issues in the County and State. There are innumerable benefits that parks and open space provide to the citizens of Chisago County. These range from health benefits (and reducing health care costs), providing alternative transportation options, open space benefits and economic development opportunities that support quality of life for County residents. As noted in the vision statement, Chisago County should develop **“a park and trail system focusing on diverse natural resources and the recreational needs of Chisago County residents and visitors.”**
2. The Parks department seeks to operate in as sustainable manner as possible. Sustainability for the County Parks Department means seeking to have as high a return on investment as possible while striving to ensure park fees do not become barriers to park use. The County should consider the transfer of costs to users through a mix of fees, vendors in parks, the selling of naming rights, sponsorships, advertising and innovative funding opportunities. The Parks department seeks to be socially sustainable by ensuring access to all to parks facilities. The park system also strives to contribute to environmental sustainability through the management of existing properties, acquisition of key habitat areas and by making improvements in operations.

3. The County Park system provides both local and regional park services. Chisago County Parks and Trails have a unique role as a regional service provider and should provide facilities that serve rural and urban residents with unique, often larger, regional destination parks.
4. The County is regional trail provider. Because Chisago County has several cities within it and directly adjoins four other Minnesota counties, the County has a special role in providing trails and trail connections. These trails are immensely popular and provide alternative transportation options. A high priority of the trails plan update is the continuing development of trails throughout the County.
5. Chisago County Parks have a very limited role in providing active and organized programs. There are many recreational program providers within the County, including cities and private athletic associations that provide such opportunities to residents.

Introduction

The Chisago County Park system includes parks and trails providing access to area lakes and rivers, water and natural areas. The parks have basic amenities that facilitate the use of the parks and trails. These facilities offer residents and visitors an escape away from urban and suburban noise, pavement and congestion. The County has protected these sites from over use and over-development and they represent an asset that residents will cherish for generations to come.

Chisago County is a growing county with a well-established park and trail system that requires extensive management, maintenance and planning. The County's park system contributes to the high quality of life for all residents and to the overall appeal of the County as a desirable place for people to live and recreate. The Chisago County Park and Open Space System now has five parks - Dennis Frandsen, Fish Lake, Checkerboard, Kost Dam and Ki-Chi-Saga. Most of the land acquisition is complete for the five parks and facilities are open in all five of the County parks. The County also has the 150-acre North Sunrise Park Reserve in North Sunrise Township that is undeveloped. The County system has more than 800 acres of County owned and managed parks and open space land and the residents also have access to about 10,000 acres of city, state and federal owned park and open space land.

In addition to the County Parks, Chisago County owns and is developing two regional trails. The Sunrise Prairie Regional Trail is planned to run north/south generally paralleling Highway 61/County Road 30 for 30 miles from Washington County on the south to Pine County on the north. The County has completed 15 miles of this paved trail from the Hardwood Creek Trail in Forest Lake to North Branch. The Master Plan for this trail (as adopted by the County Board on August 5, 2015) shows it continuing through North Branch, Harris and Rush City to the northern boundary of the county.

The other County trail is the Swedish Immigrant Regional Trail that will eventually cross the southern part of Chisago County. As shown in the adopted Master Plan for the trail, the County is planning for the 20-mile-long trail to connect Taylors Falls to Wyoming primarily following a former railroad line. Several segments of this trail are now complete with the County planning to construct more trail segments during the next several years (as funding allows). The County Board adopted the Master Plan for this trail on June 17, 2015.

The recent State Comprehensive Outdoor Recreation Plan (SCORP) prepared by the Minnesota Department of Natural Resources (DNR) stated that, “about two-thirds of all recreation use in the state occurs within a half hour of home.” Chisago County provides outdoor recreation opportunities throughout the entire County, thereby providing most residents with recreation opportunities within a half an hour of their homes. In addition, the County’s proximity to the Twin Cities metropolitan area provides easy day-trip opportunities for visitors from the seven county area.

This Plan provides an update to the existing Comprehensive Parks and Trails Plan dated June 2002. The previous writing provided an inventory of the entire parks system and while the County has made some changes or additions to the system, the overall plan remains valid for the purposes of this plan update. This plan update also describes how Chisago County will develop, maintain, improve and preserve its parks and trails system. System improvement is expected to continue and be focused on the enhancement of existing park and trail facilities and continued improvement and expansion of bike/walk trail system.

Park and Open Space Plan

Well-planned, developed and maintained park systems enhance the quality of life for residents and make communities healthy and attractive places to live, work, and visit. Park and open spaces benefit both present and future generations. Through the county’s park and open space programs, the County has helped to preserve historic, geologic and natural features in county parks and vital natural systems.

Links to the past, to natural processes, to the landscape

Landforms and geology provide a record of how glaciers and erosion shaped the land and how it was occupied, used, and developed over time. Natural areas show the underlying physical and biological processes that have sustained humans over time. Archaeological sites show evidence of previous cultures and ways of life. Historic sites give insight into the lives of early settlers. The vision of having a County park and trail system that focuses on the diverse natural resources will help residents and visitors see and enjoy the links to the past and the natural processes and landscape in Chisago County.

Benefits in the present

Parks, with their amenities and recreational areas, provide an orienting sense of place and definition to communities. They contribute significantly to residents’ relaxation and quality of life with facilities for interaction with friends and family. Evidence of the value of open space is seen in the generally higher property values around parks and open spaces. Having a County park and trail system that focuses on the diverse natural resources will provide benefits now and in the future to residents and visitors to Chisago County.

The aesthetic benefits of natural resources, including lakes, rivers, woods, wetlands and wildlife, are increasingly important as a contrast to urban land use and development. Chisago County residents continue to express a desire for outdoor recreation opportunities that provide for solitude, reflection, physical exercise, challenge and relief from the stress and tension of daily responsibilities.

Benefits for the future

Preserving parkland and natural areas now is critical to the County’s livability, sustainability, stewardship and prosperity. These actions show concern for subsequent generations and will allow individuals in the future to experience the natural environment. The benefits of

having additional park and open space lands with interconnected trails while protecting natural systems now will be even more important as the county's population grows. Increased development and higher property values will hinder attempts to acquire and protect critical areas in the future. This is important to note because as is stated in the plan mission statement, **“Protecting the natural resources, balancing the demand for recreation with the need for conservation, offer recreation opportunities that encourage healthy lifestyles and provide clean, safe and accessible places for leisure time activities” is a primary motivator and driver for this Comprehensive Parks and Trails Plan.**

Plan Objectives

The Comprehensive Parks and Trails Plan needs to address trails and environmental lands in addition to parks and recreation facilities. This Plan update should primarily focus on parks, trails and environmental lands. The following objectives shall help establish the steps necessary to provide quality parks, trails and recreation opportunities and facilities for both citizens and visitors to Chisago County.

Objective 1. The residents in Chisago County are our most important customers.

Objective 2. Chisago County recognizes the importance of communicating our presence to residents and visitors.

Objective 3. There are different expectations and service requirements and needs based on the nature of the urban, suburban and rural character of the different areas within the county. As such, the Chisago County should strive to coordinate with other agencies to provide facilities that address these differences.

Objective 4. Chisago County will facilitate the development of a well-balanced system of park and trail facilities that include active and resource based recreational opportunities for healthy lifestyles while meeting the needs of a variety of individuals and groups and the changing demographics of the County.

Objective 5. Chisago County will foster the identification and possible development of a comprehensive and connected open space, reserve, trail, waterway and bikeway system that provides scenic, eco-tourism and resource-oriented recreation.

Objective 6. Chisago County will strive to ensure equal access and maximum availability to all facilities, programs and services.

Objective 7. Chisago County will promote its natural environment and will establish policies and priorities for conserving, protecting and restoring existing natural features and amenities to ensure their ongoing availability, to support public health and to maintain a high quality of life.

Objective 8. Chisago County will develop, improve, maintain and manage its park and trail facilities and resources to promote a positive and safe image and will use sustainable practices wherever possible.

Objective 9. Chisago County recognizes that it is imperative to identify and implement methods to finance the on-going operation, management, needs and improvement of County park and trail systems.

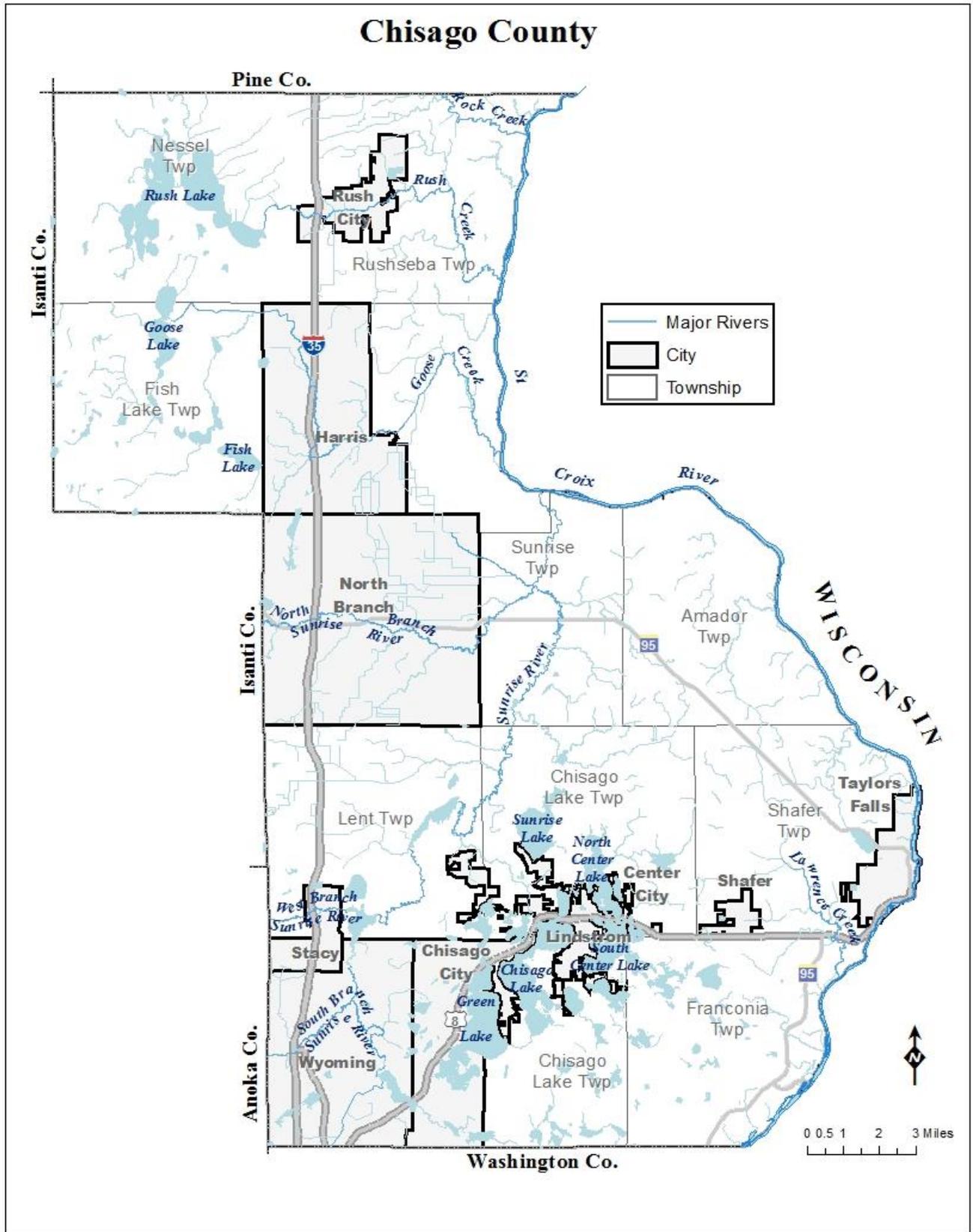
Objective 10. Chisago County recognizes that survival, growth and effectiveness of its parks and trails will depend on the ability to focus on a formalized mission and the ability to develop and maintain partnerships with cities, school boards, watershed districts, not-for-profit agencies and the private sector.

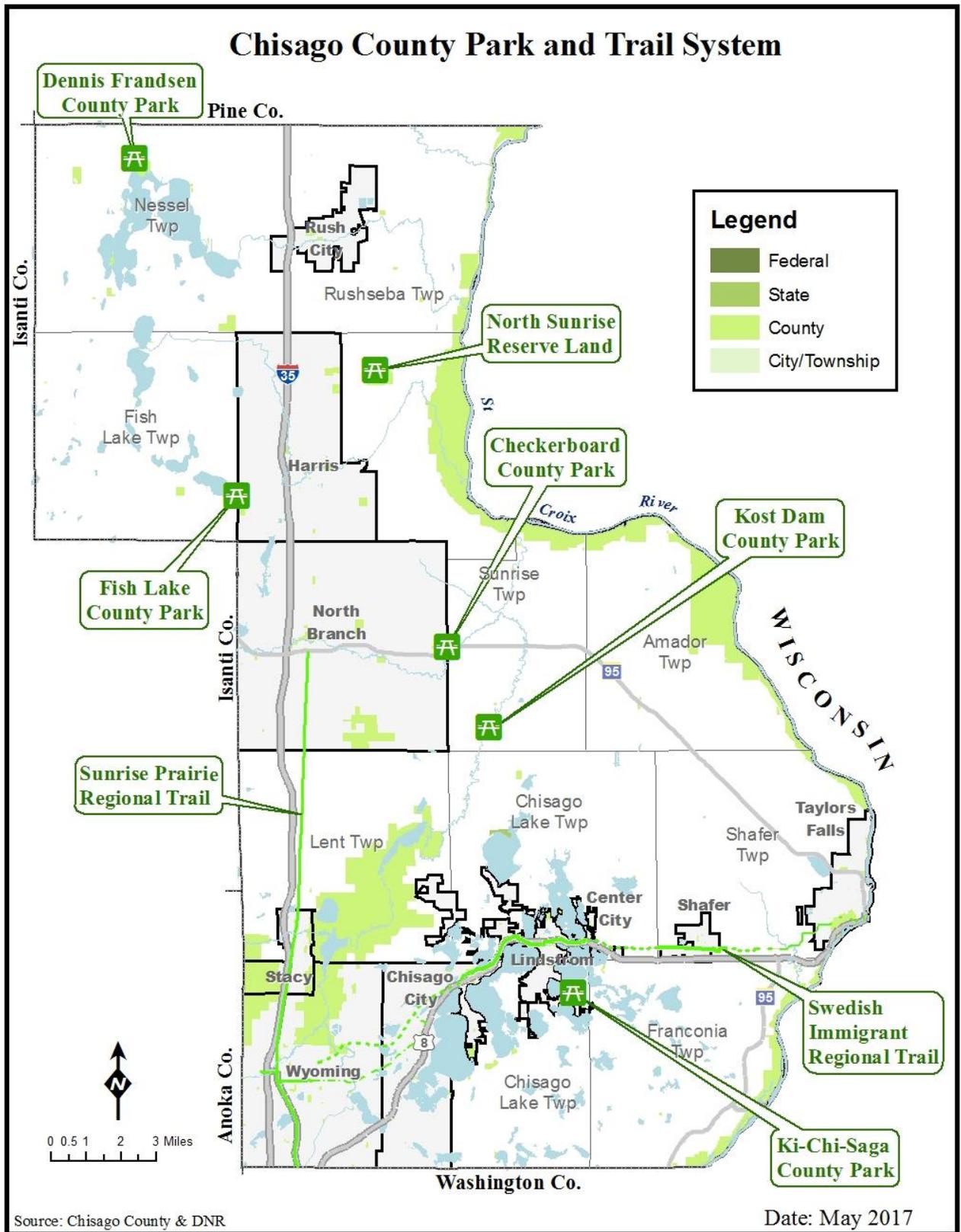
Objective 11. Chisago County recognizes that adding programming (whether publicly funded or privately sponsored) to the county parks would provide more and new opportunities to connect people to the outdoors.

Through the public engagement process for this plan update, residents and county park users clearly indicated that parks and trails are an important part of life in Chisago County. Parks and trails are a source of pride for residents and a commitment from the County for these resources will ensure that they will remain as such well into the future. In addition, the public noted their preference for Chisago County to enhance the park and trail system.

Their vision included a varied, accessible and interconnected open space system that a wide range of people can use throughout the year with local and regional trail connections to the parks system, the area cities and the surrounding areas.

The County will need to invest in and improve the quality of the park and trail facilities to keep pace with changing needs, lifestyles and demographics. The residents also envision improved water quality for the lakes and rivers making them a more enjoyable resource. All improvements to the County parks and trails systems, programs and service should be made to improve and expand recreational opportunities for Chisago County residents and visitors.





Guiding Principles

Based on the vision and mission statements and the key points (noted earlier), the following is a list of guiding principles for this plan:

1. The County's parks, trails, open spaces, natural areas, recreation facilities and programs are essential elements that help create a livable, dynamic and economically vibrant county.
2. The County, the cities and region have an interconnected system of corridors, trails, parks, natural areas, streams, rivers and resources that the agencies must continue to protect and keep ecologically healthy. An integrated and coordinated system of community centers, parks, trails and other recreation facilities will serve all County residents and should contribute to regional diversity.
3. All of Chisago County's residents should have access to, feel safe and welcome in and are equitably served by the County's parks, open spaces, natural areas, recreation facilities, programs and services. The County must recognize the changing demographic make-up and the trends and needs that an aging population will bring to Chisago County. In addition, the County needs to engage the youth (the "plugged-in" generation) in outdoor recreation opportunities. The benefits of park use are many, including improvement to physical health, well-being, learning and family bonding. Therefore, it is imperative that all residents of the County have the opportunity to enjoy the resources that the County parks and trails can provide. To help with this, the County should work to remove or reduce barriers such as safety concerns, cost, transportation and a lack of information about facilities that prevent the use of parks and trails. If needed, the County should design new facilities and/or programs (including marketing programs) to increase the use of the County Parks and Trail system by all residents, irrespective of race, ethnicity, income and ability.
4. Chisago County resident's value and care for public spaces and resources, recognize and respect the intrinsic values of all organisms and are stewards for all elements of the built and natural world, sustaining them for future generations.
5. Since there is a wide range of users and recreation needs, Chisago County and other area agencies must plan for and maintain a full spectrum of diverse, high-quality parks, trails, open spaces, natural areas and recreation facilities, programs and services. This will create a wide range of recreation opportunities that will bring joy, relaxation, fulfillment and growth to the lives of Chisago County's residents.
6. Beautiful public spaces and innovative park designs can provide places for a wide variety of experiences ranging from quiet contemplation and relaxation to active recreation in the entire County.
7. The County, State and Federal governments have acquired and protect ample lands and facilities to provide a wide variety of high-quality parks, trails, open spaces, natural areas and recreation facilities to meet current and future recreation, open space and natural protection needs. The decision to acquire additional public park and open space land should meet a higher burden of proof – i.e. just because it is free, do not necessary take it. Future acquisitions should emphasize important natural

resource features, access to water bodies and natural resource features that enhance outdoor recreation. Because of strong public attraction to water resources, the County should give the acquisition of additional public water frontage a high priority. The high demand and escalating value of water frontage will only make those lands costlier in the future. The priority is to acquire water frontage lands when they are most affordable – when they are undeveloped or, at least, developed with less expensive homes. The County should consider the longer-term return on the investment or its ability to invest in such properties when considering acquiring any additional property.

8. Activities in County parks must be tied to the natural resources of the parks, but not adversely affect them. Some recreation uses are not compatible with others and the County has the responsibility to determine what if any uses should be permitted and where those activities should occur in Chisago County. Examples of activities that the County can now accommodate in the parks include boating, bicycling, fishing, hiking/walking/trail running, nature appreciation, picnicking, cross-country skiing and swimming. When new recreational activities become popular, Chisago County will need to determine if those activities are appropriate in the County parks. For example, according to the Outdoor Foundation, adventure racing, kayaking, standup paddle boarding, triathlons and windsailing have become increasingly popular in the last ten years. To accommodate new recreation activities in the County parks, Chisago County must first decide how well the proposed activity meets the vision and mission the County parks and then determine how it would meet the County's standards for recreational activities. Any significant change to a park or to a park master plan to accommodate new uses should include a significant public engagement process.

Some new recreation uses may be compatible with the vision and mission of the Chisago County Parks system. In some instances, new uses may enhance the viability of the County parks and expand the range of recreation opportunities available in the parks, park preserves and trails. Other recreation uses may substantially reduce the ability of the park facilities to carry out their planned roles or may diminish the quality of a persons' recreational experience.

9. Wherever possible, encourage and use County park and trail design to reasonably accommodate trail users of all abilities and those with mobility impairments (such as motorized wheelchairs or three-wheeled bicycles).
10. The County must protect the investment in acquisition and development of parks and trails by assuring that every component and facility is able to carry out its designated role as long as a need for it can be demonstrated.

Plan Direction

The updated County Parks and Trails Plan places an emphasis on developing, maintaining and improving a park and trail system that:

1. Recognizes the changing recreational and leisure needs and interests of the residents.
2. Provides parkland, facilities, programs and services that are properly designed, developed and maintained for established and changing County demographics.
3. Show cases the County's heritage through conservation, restoration and interpretation of cultural and natural resources.

4. Improves personal and community health by providing an interconnected and coordinated trail system and natural resource-based park features that encourage unstructured active outdoor recreation opportunities for youth, adults and families.
5. Promotes improved and expanded access to County parks and trails.
6. Strengthens the use of County parks and trails by all County residents and visitors to Chisago County including those across age, race, ethnicity, income, national origin and ability.
7. Provides a comprehensive park and trail system that preserves high-quality natural resources, fosters healthy outcomes, connects communities and enhances the quality of life in Chisago County.

The County should continue to cooperate with other units of government in developing a trail and recreation system that provides experiences that are coordinated with but not now available in the County.

Chisago County also embraces the four strategic directions established by and in the State of Minnesota Parks and trail Legacy Plan documents. These include:

- Connect people and the outdoors.
- Coordinate among partners.
- Take care of what we have.
- Acquire land, create opportunities.

These four strategic directions parallel the policy direction in Minnesota's Statewide Comprehensive Outdoor Recreation Plan (SCORP, 2014). SCORP, noting the changing demographics and declining per-capita participation in nature based outdoor recreation, emphasizes the importance of connecting people to the outdoors.

RECREATION & OPEN SPACE ELEMENT

Open Space and Development

September 2017



Chisago County Comprehensive Plan

2017

Open Space and Development

County residents have consistently expressed a desire for preservation of natural resources, “rural character”, cultural and historic resources, wildlife habitats and general open space. The majority of citizens of Chisago County would like to have some open space areas remain in the county and would like to see a variety of voluntary options or incentives in place for current landowners to participate in open space preservation.

In recent years, Chisago County conducted several studies, organized several different task forces and implemented zoning ordinance changes relating to open space and preservation of natural resources. Some of these include: clustering options for subdivisions, the Green Corridor Study and the Transfer of Development Credits program that included the Transfer of Development Credits Advisory Committee. Each of these is discussed in further detail below.

Clustering Option for Subdivisions

When the Chisago County Zoning Ordinance was updated in 1997, a clustering option for subdivisions was included. This portion of the ordinance was designed to allow some flexibility in the subdivision of land in the Agricultural District to aid in the preservation of farmland, natural resources, wildlife habitat and open space in the County as long as it does not result in service burden to local governmental units, does not create land use conflicts and does not adversely impact the environment. The clustering option allows for a reduction in lot size to one acre and minimum width of 200 feet as long as the land included in the density calculation has a covenant, deed restriction or development contract recorded against it. The principle tool for protecting open space areas is a conservation easement. In April of 2002, an amendment was made to the County zoning ordinance to allow for a density bonus increase of 30%, reduction in lot size to 33,560 square feet, and a minimum lot width of 150 feet if a community sewage treatment system and community water supply is utilized.

The current clustering option zoning ordinance language does not specify the amount of land that must be left as open space nor does it specify in any detail the uses that may be provided for in the open space area.

Green Corridor Study

Green corridors are protected areas of farmland, natural areas, scenic areas and other open spaces linked together throughout the community. Green corridors can help communities keep the natural landscape while accommodating growth. By connecting open spaces, green corridors help wildlife safely move and reproduce in addition to helping preserve the rural character.

In 1998 and 1999, Chisago County took part in the Green Corridor Project along with Washington County. The Legislative Commission on Minnesota Resources provided funding for a two-year effort to develop green corridors in Chisago and Washington counties with incentive-based land conservation tools. The Project conducted research, planning, provided technical assistance, convened public forums for education and discussion and drafted pilot conservation programs.

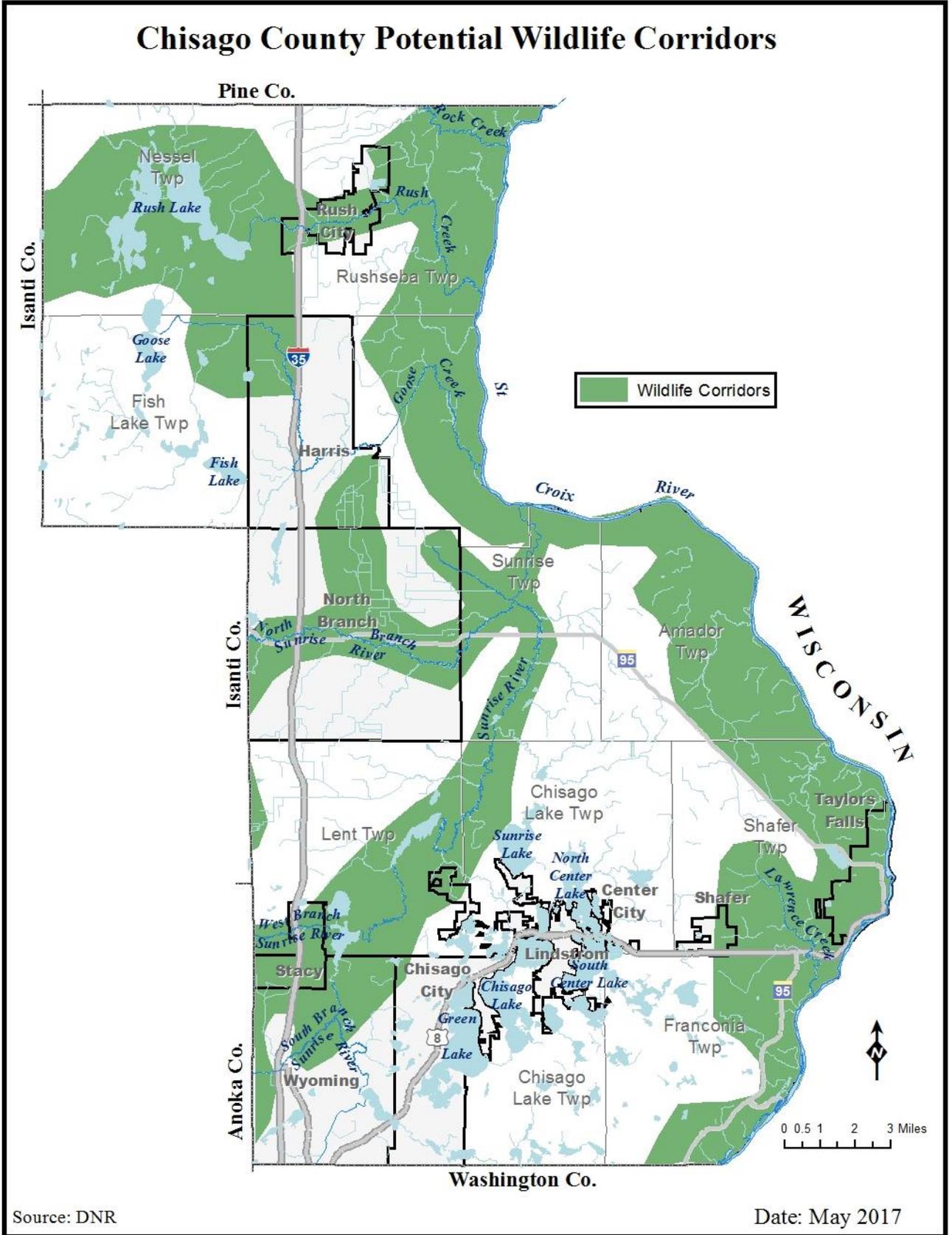
The Green Corridor Project mapped areas within which to target conservation efforts and proposed a strategic, community-based approach to conserving land within areas called the “Green Corridor”. The maps evolved from a year-and-a-half effort to combine scientific data, community input and local government plans. The Project proposed that new and existing conservation options for landowners be focused in these areas. The project areas were not designed with the expectation that all of the mapped open spaces would be protected, but that specific program criteria would further prioritize areas appropriate for each land conservation tool. Also, the Green Corridor Project recommended that local priorities for trails and public parks complement the Green Corridor opportunity areas.

To develop the maps, the Project developed four program objectives: protection of agricultural land, preservation of natural habitat diversity, protection of environmentally sensitive areas and preservation of scenic areas. The mapping was based on 17 criteria that are included in the Creating Green Corridors in Chisago and Washington Counties final report. In order to protect wildlife corridors and large blocks of agricultural land, the Project aimed to create corridors of connected open spaces, including existing protected areas. High value open spaces that could not easily be connected to other important open spaces were not included in the opportunity areas.

Highlights of the Green Corridor opportunity areas in Chisago County include forests in the St. Croix River Valley, ecologically valuable lands along the Carlos Avery Wildlife Refuge, the Sunrise River corridor, and large blocks of agricultural lands in the north, central and southeastern parts of the county. The “Green Corridor” Opportunity Areas are shown in the map page 4-22.

The Green Corridor Project proposed that local governments and landowners use four incentive-based conservation tools for lands designated as opportunity areas. These tools are: donated conservation easements, purchased development rights, transfer of development rights and land acquisition. Residents with land in the opportunity areas should have priority in conservation programs. To be eligible for local program incentives, lands must meet certain criteria and the landowners must want to participate. In 2008, the County eliminated the Green Corridor Program from the TDC program and adopted the DNR Metro Conservation Corridor “Sensitive Natural Areas” (Biotic Communities) Map for use in the Development Transfer Overlay Program. For more information about Sensitive Natural Areas and Biotic Communities, please see the Natural Resources Element of this plan.

Chisago County Potential Wildlife Corridors



Source: DNR

Date: May 2017

Chisago County Transfer of Development Credits Advisory Committee Report and Transfer of Development Rights Program

As a part of the Green Corridor Study, a Transfer of Development Rights (TDR) program was designed. The Green Corridor Opportunity Areas were designated as the “sending area” where conservation would be encouraged. The Project suggested that areas within and immediately surrounding cities would serve as the preferred “receiving area” where increased development densities would be transferred. Maximum conservation value would be achieved by reducing the allowable building density in the sending area and assigning development credits to replace original building density. Developers who purchase TDR credits could build at higher densities in the receiving areas.

In July 1999, The Chisago County Board commissioned the Transfer of Development Credits (TDC) Advisory Committee to “provide to the Chisago County Planning Commission and the Board of Commissioners recommendations specifically dealing with the potential use of Development Credits as a land management tool/technique.” In addition, the committee evaluated and made recommendations on a Purchase of Development Rights (PDR) program.

The 22-member TDC Advisory Committee was primarily a citizen’s task force, representing a wide range of perspectives, interests, residency and public policy positions. It approached the TDC and PDR concepts with a fresh perspective and largely confirmed the earlier work of the Green Corridor Project.

Transfer of Development Credits Program

In May of 2001, Chisago County adopted zoning ordinance language establishing a transfer of development credits program in the Agricultural Zoning District. As a pilot for the program, it was decided that the ordinance would only be in effect in the Chisago Lakes and Franconia School Districts. The Green Corridor Opportunity Area that falls in the Chisago Lakes and Franconia School Districts was designated as the “sending area” and any land outside of the Green Corridor Opportunity Area was designated as a “receiving area”. The ordinance allowed for land in the sending area to rezone to a Protection and Transfer District (PAT) where development is reduced to a 1 per 20 - acre density and the ability to sell development credits at a 1.25 credits per 5 acres. The credits that are sold are then allowed to be used for density increase in the receiving area in the RRI, RRII or Resource Protection Districts. Density increases are allowed to be increased up to 50% in the RRI and RRII Districts and by no more than 100% in the Resource Protection District. The use of credits in the Resource Protection District allows the development to occur under the current clustering regulations.

In 2008, the County Planning Commission conducted a review of the issues and concerns about conservation design, cluster developments and the transfer of development credits program. After several meetings and presentations in 2008, the

County decided to make several changes to Development Transfer Ordinance (DTO) ordinance. As stated in the ordinance, “the purpose of the DTO District is to create an alternative growth management strategy that allows the transfer of development from one area within the district to another area within the district, provided that the transfer does not result in an undue increase in development density in a sensitive natural area and does result in the protection of valuable resources.” The changes included eliminating the use of the Green Corridor Map and using the Biotic Community (Sensitive Natural Areas) Map, as configured by the DNR as a sending-only zone. The changes also expanded the program to be County wide (in the unincorporated areas) so all areas would be eligible to send and receive density credits, with the requirement that transfers remain in the same school district. The ordinance changes also increased the density bonus from 1.25 to 1.5 per yielded five-acre tract rezoned to Protection and Transfer District (PAT).

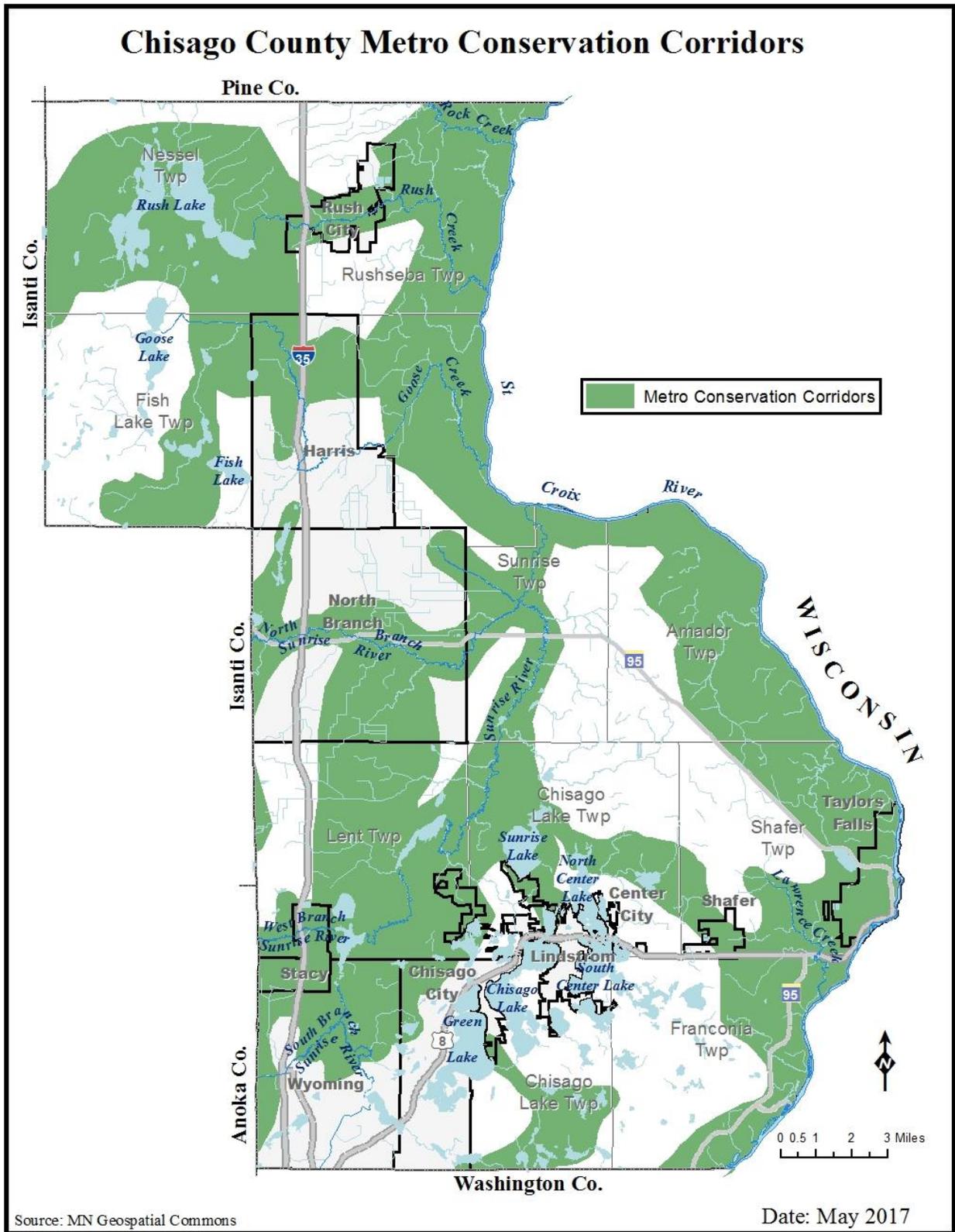
From 2001 through 2006, several properties were rezoned to the Protection and Transfer District and some developments used the transfer of development credits program. From 2001 through 2006, 156¼ acres were rezoned to PAT, a total of 31¼ credits were issued and 11 credits were retired. From 2003 – 2008, the County issued 50 credits and retired five credits as part of this program. From 2008 through 2016, the County did not issue any development credits or retire any credits as part of this program. The County might need to adjust the program to make it more useful or appealing when the zoning ordinance is updated following adoption of this comprehensive plan.

Metro Wildlife and Metro Conservation Corridor Mapping

As discussed in the Natural Resources Element, the Metro Wildlife Corridor program was expanded into Chisago County in 2004. As a part of this program, wildlife corridor areas were mapped as shown. Property owners in those areas could then apply for funding for habitat protection and restoration projects. The program used a strategy for accelerating and enhancing habitat focus area and better coordinating efforts of conservation groups. This wildlife corridor mapping also should be taken into account in any open space preservation efforts, conservation programs and park planning the County undertakes.

As is also noted in the Natural Resources Element, another program that was intended to preserve natural and wildlife areas in the region was the Metro Conservation Corridors project that included the DNR Metro Greenways Program. This program ran from 1998 to 2011 with the goals of planning, protecting, restoring and reconnecting remaining natural areas in the Twin Cities greater (12-county) metropolitan region into a web of natural lands. The strategies used by this program included providing competitive grants to restore degraded habitats, grants to support the acquisition of important parcels of habitat, incentive grants to local governments to address conservation needs and natural resource based workshops.

Chisago County Metro Conservation Corridors



Source: MN Geospatial Commons

Date: May 2017

Open Space and Development Goals and Policies

General Policy Statements

1. Cluster development should be voluntary with strong incentives, not mandatory.
2. Objectives of cluster development should include:
 - a. Preserving unique and environmentally sensitive natural features.
 - b. Protecting wetlands, shorelands, woodlands and agricultural lands.
 - c. An opportunity to promote common sewer and water.
 - d. Providing commonly owned open space areas for passive and/or active recreational use by residents of the development and/or the larger community.
3. The County will seek a variety of ways to encourage the preservation of open space.
4. The County will seek information that would assess and prioritize the quality of open space.
5. The County will define a broad range of different types of open space.
6. Define “high quality” wetlands that could be counted as part of the “open space” in a development.

Goal: Encourage an interconnected network of protected open space to achieve multitude of community goals – recreational trails system, wildlife corridors and habitat, stream corridor protection, or preservation of viable agricultural land. New development design, approval and construction must be coordinated with this goal in mind.

Policies:

1. Open Space shall be defined as land used for agriculture, natural resource protection, wildlife habitat corridors and/or recreational purposes, that is undivided and permanently protected from future development.
2. Whenever possible, open space shall connect with existing or potential open space lands on adjoining parcels.
3. The County will encourage the use of strong incentive based programs to achieve land use and open space goals and objectives.
4. The County will promote educational programs to educate current residents and prospective property owners on items such as land stewardship, conservation of natural resources, significance of natural areas and open space.
5. The County will encourage and accept land gifts and land forfeitures in areas with potential recreation development, open space or preserve value.
6. The County will continue to require dedication of parkland or cash in lieu of land in conjunction with the subdivision of all properties.
7. The County should develop land use regulations to ensure the compatibility of land uses adjacent to parks, recreation areas, natural features and special management areas. i.e. public or private buffers, increased setbacks.

Goal: Cluster Development will be encouraged for the development of rural housing clusters that meet one or more of the following purposes:

- ***Provide efficient use of the land while maintaining contiguous blocks of economically viable agricultural land, mature woodlands, and open space, and preserving historical features, scenic views, natural drainage systems, sensitive or rare natural features, biotic communities and other desirable features of the natural environment.***
- ***Create neighborhoods with direct access to open space, distinct identities and sense of community.***
- ***To encourage innovation and promote flexibility, economy and creativity in residential development.***
- ***To provide dedicated open space areas for passive and/or active recreational use by residents of the development and, where specified, the larger community.***
- ***To provide for a diversity of lot sizes, housing choices and building densities to accommodate a variety of age and income groups.***
- ***To preserve scenic views and elements of the County's rural character by minimizing views of new development from existing roads.***

Policies:

1. The County shall consider the option of cluster type development in the Rural Village Centers to create a more compact development pattern that echoes the traditional interconnected street pattern and "village" character of these towns while creating and protecting a surrounding greenbelt of open space.
2. The County should allow a cluster development option in the rural residential area as long as private wells and onsite wastewater treatment areas are reserved so that in the future setbacks between well and septic treatment areas are not compromised.
3. The County will encourage the preservation of lands for open space that are substandard for development and have limited land use due to slope, soil characteristics, wetlands or other physical limiting conditions.

AGRICULTURAL ELEMENT

September 2017



Chisago County Comprehensive Plan 2017

Agriculture

Chisago County has been an agricultural area since its permanent settlement by immigrants in the mid and late 1800's. The first farms were developed from land appropriated through provisions in the Homestead Act and other governmental expansion acts. These acts gave each farm family approximately 160 acres of land if they would farm the land for five years. This legislation enabled farm immigrants to establish themselves agriculturally in this area.

From the time the county was first settled until after World War II, farming was of subsistence nature. These farms had a diversity of livestock and crops from which the farm family provided for their essential needs. Production for the market was limited. The major crops during this period were small grains such as wheat, barley, rye and oats. Forages were grown for livestock feed. The land also was suited for potato production and many farms produced potatoes for the commercial market. Livestock included dairy, pigs, beef cattle and chickens, with a variety of these on individual farms.

After World War II, farming practices benefited from a tremendous increase in technology and farm mechanization, providing for more efficient and increased production. There also was a trend to farm specialization and cash crop production such as corn and soybeans. The limiting factors for cash crop production are soil condition, rainfall and temperature.

In the early 1900's agriculture became the dominant industry in the county because most of the forests had been cleared and the logging industry declined. Today, agriculture is still the primary land use in the county, but the county is rapidly changing. Many of the changes are occurring because Chisago County is one of the fastest growing non-metropolitan counties in Minnesota, in part, because of its proximity and accessibility to the Minneapolis/Saint Paul metropolitan area and, in part, because of the attraction of its abundant natural amenities.

According to the County Assessor's Office, there were 106,546 acres of land in the County (about 37 percent of the County) used for agricultural purposes in 2016. This makes agriculture the predominant land use in the County. Commercial agriculture and related service businesses continue to be a major element in the County economy and employment base, particularly in the unincorporated areas. Farming and agricultural-related businesses have been and will continue to be an important part of the identity of Chisago County.

The purpose of the agricultural element is to encourage long-term commercial agriculture and prevent the premature conversion of agricultural land to non-farm uses. In addition to traditional agricultural uses, it is the intent of Chisago County to allow low density single family residences, agri-business, commercial recreation, rural retail tourism, mineral extraction, home occupations, public uses, recreation and conservation land uses in the agricultural and rural areas of the County.

Inventory of Prime Farmland

According to the Chisago County Soil Survey, prime farmland, as defined by the U.S. Department of Agriculture, is land that is best suited to produce crops. It may be cultivated land, pasture or woodland, but it is not urban and built up land or water areas. The soil qualities, growing season and moisture supply are those needed for a well-managed soil to produce a sustained high yield of crops in an economic manner. Prime farmland produces the highest yields with minimal expenditure of energy and economic resources, and farming it results in the least damage to the environment. Other factors include favorable temperatures and acceptable levels of acidity or alkalinity. Prime farmland has few or no rocks and is permeable to air and water. It is not excessively erodible or saturated with water for long periods and is not frequently flooded during the growing season. Prime farmland usually has slopes ranging from zero to six percent.

In 2004, about 82,000 acres in the survey area, or 31 percent of the total acreage, met the soil requirements for prime farmland. Scattered areas of this land are throughout the county. About 60,000 acres of this prime farmland (73 %) in 2004 were used for crops. The crops grown on this land are mainly corn, soybeans and small grain.

The map on page 5-4 shows the areas of prime farmland in Chisago County as determined by the Minnesota DNR.

Crop Productivity Index

Another rating of farmland is the Crop Productivity Index (CPI). These ratings are generally used to estimate the potential crop production capacity of soils. The CPI provides a relative ranking of soils based on soil and landscape properties. It is a numerical rating that considers the potential yield of one soil against that of another over a period of time under a defined level of management. The United States Department of Agriculture Natural Resources Conservation Service (NRCS) has put these ratings into an index for quick reference. The ratings range from 0 to 100, with the higher numbers indicating soils having favorable properties and higher production potential.

The CPI ratings are based on the physical and chemical properties of the soils with consideration given to such conditions as flooding, ponding or surface saturation. The major properties evaluated when the ratings were generated included average water capacity, pH reaction, slope, soil moisture status, cation-exchange capacity, organic matter content, salinity and surface fragments. Since corn is the most widely grown crop in Minnesota, the soil properties used to develop and calculate the CPI were those that are important for the production of corn.

Each soil component was evaluated by scientists who surveyed the land using the cropland productivity rule in the National Soil Information System and a CPI was generated. During the rating of the soils, the following assumptions were made:

- (1) Adequate management
- (2) Natural weather conditions without irrigation
- (3) Artificial drainage where required
- (4) No land leveling or terracing, and
- (5) No climatic factors are considered.

The CPI is a pure value based on soil and landscape properties that consider the long-term production capacity of a soil. The CPI represents the typical condition of the soil before local modifiers and adjustments are applied to adjust values conditions such as accessibility, poor drainage, river or stream overflow, field size or field shape. The Board of Water and Soil Resources (BWSR), NRCS and local soil and water conservation districts (SWCD) currently use and support the CPI ratings system.

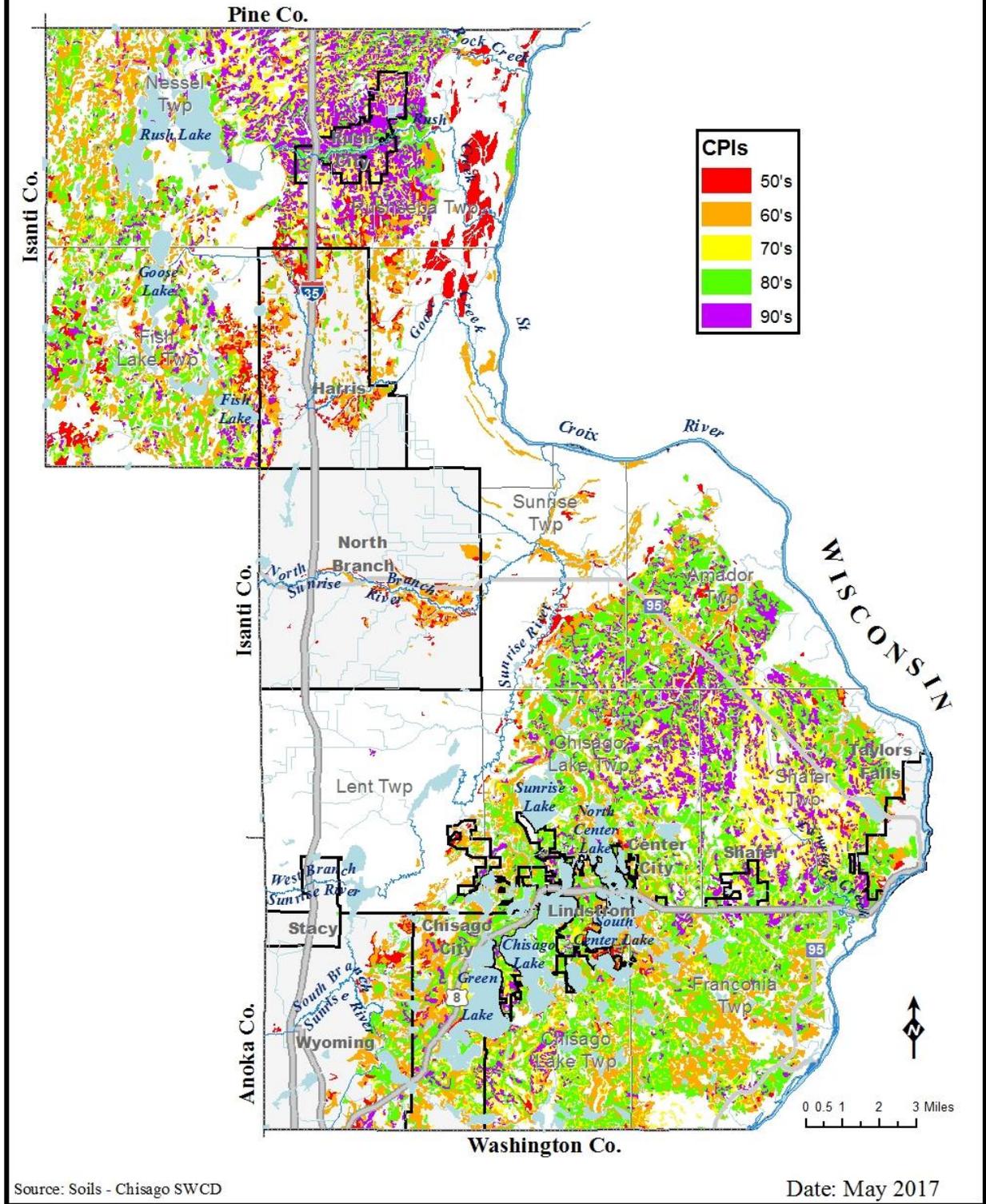
The areas of Chisago County with the highest CPI ratings are generally in the southeast corner and in the north central portion (in and around Rush City). The maps on pages 5-7 and 5-8 that show the soils in Chisago County with a CPI of 50 and above and the soils with a CPI of 70 and above. These are the areas of the County that farms and farming as a source of income should be given the most protection from new development as these areas have the most productive soils. The protection and preservation of farmland is primarily for maintaining the soil resource and the farm industry.

The division of land into small parcels and the presence of non-farm activities can drastically affect farm operations. Therefore, to achieve the goal of protecting and

preserving the agricultural industry, non-farm activities in rural areas of Chisago County should be carefully considered by the County. The most important aspect of such a program is public attitude. Public support, particularly from farmers, farm-related industry and those people owning farmland in the County, is the real foundation upon which agricultural land preservation policies should be adopted and maintained.

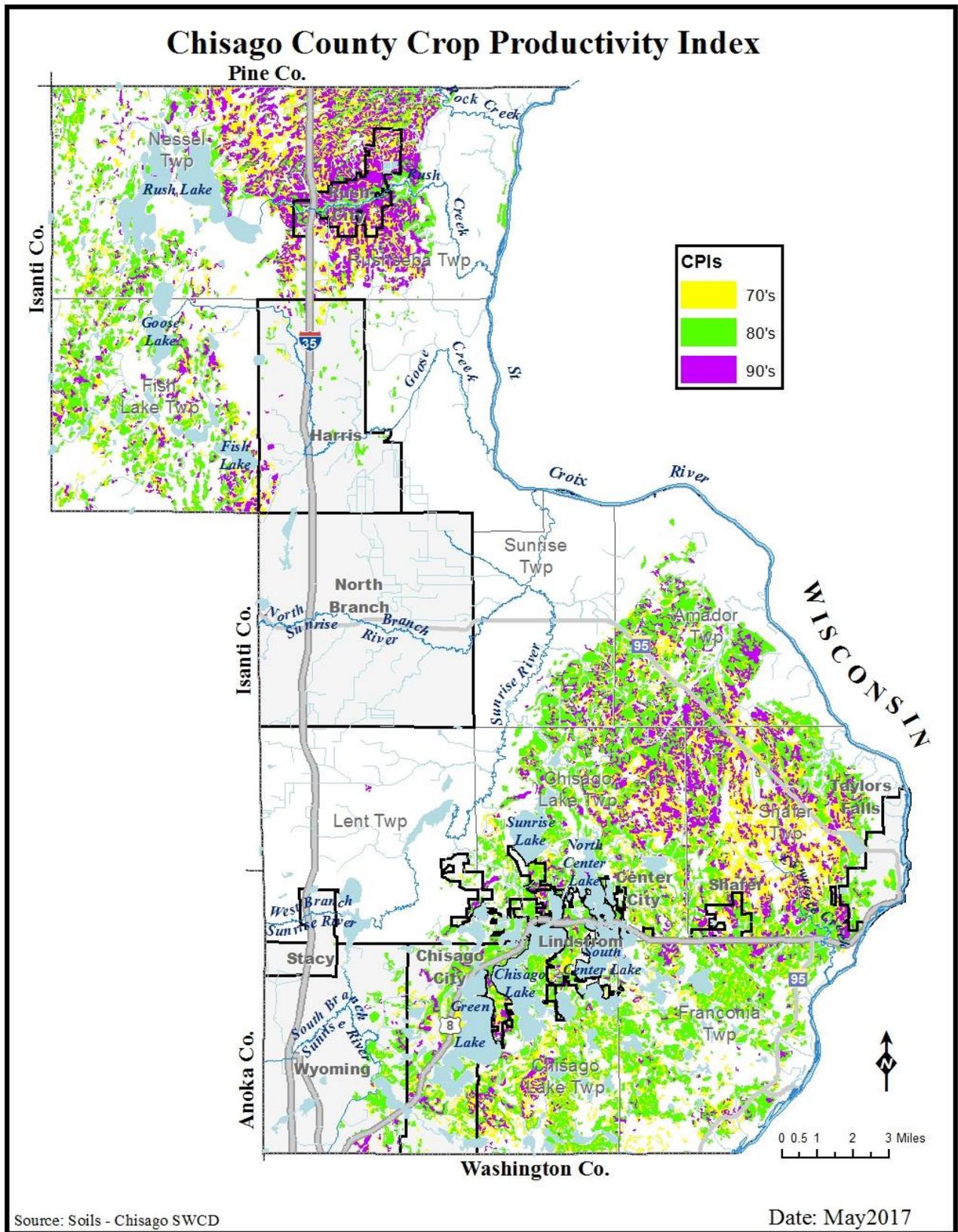
A recent trend in land use in some parts of the county has been the loss of some prime farmland to industrial and urban uses. The loss of prime farmland to other uses puts pressure on marginal lands, which generally are more erodible, droughty and less productive and cannot be easily cultivated. In 2016, several hundred acres of marginal farmland (and several small residential properties) were converted to solar gardens and solar farms – including an 800-acre solar farm in North Branch and Sunrise Township. This “temporary” (20-30 years) use of these lands could be viewed as a new age in farming – farming the sun.

Chisago County Crop Productivity Index



Chisago County Crop Productivity Index

Pine Co.



Agriculture Census Statistics

The U.S. Bureau of Census conducts an agriculture census every five years, for years ending in “2” and “7”. The Census Bureau defines a farm as any place from which \$1,000 or more of agricultural products were produced and sold or normally would have been sold during the census year. The following information on number of farms, size of farms, type of farms and land in farms is from the 2002, 2007 and 2012 Census of Agriculture County Profile published by the United States Department of Agriculture.

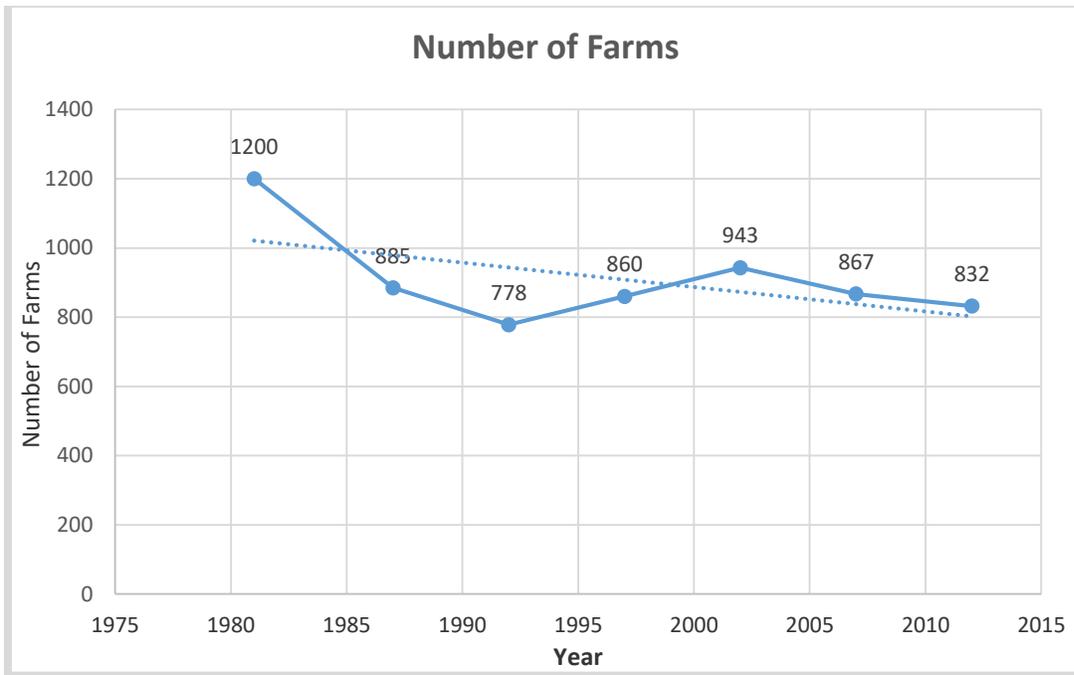
Number of Farms, Average Farm Size & Total Land in Farms

Year	1981	1987	1992	1997	2002	2007	2012
Number of Farms	1,200	885	778	860	943	867	832
Average Farm Size (acres)	154	173	178	153	124	133	137
Total Land In Farms (acres)	184,300	152,717	138,594	131,305	116,948	115,233	113,638

Source: Minnesota Agricultural Statistics (1981)
 United States Department of Agriculture – National Agriculture Statistics Service
 (1987, 1992, 1997, 2002, 2007, 2012)

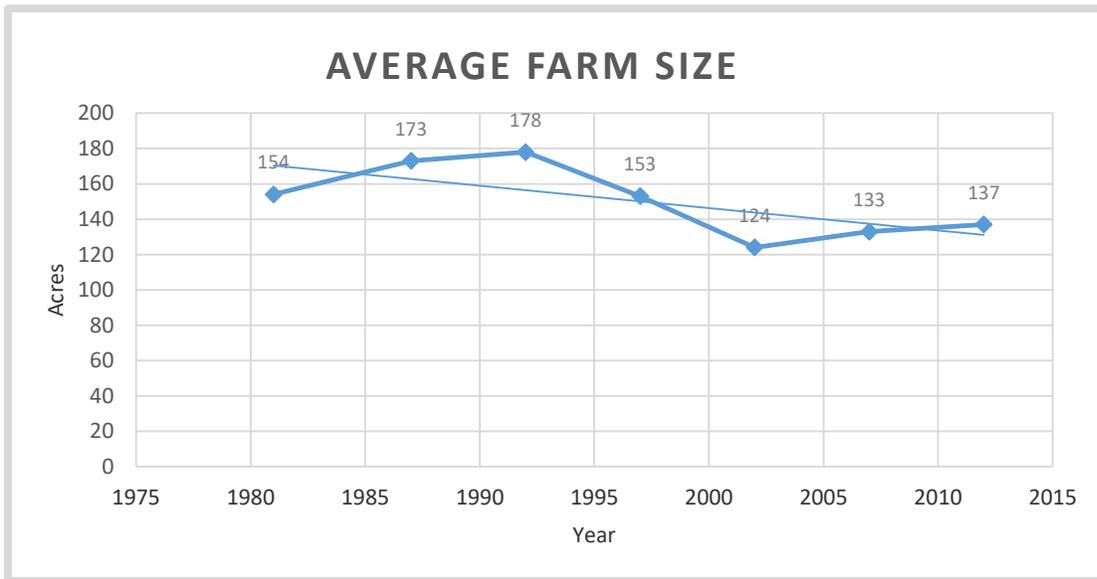
Number of Farms

In the 25-year span from 1987 to 2012, the number of farms in Chisago County decreased a total of 53 farms. However, the number of farms in the County actually decreased from 885 in 1987 to 778 in 1992, rose to 943 in 2002 and decreased to 832 in 2012.



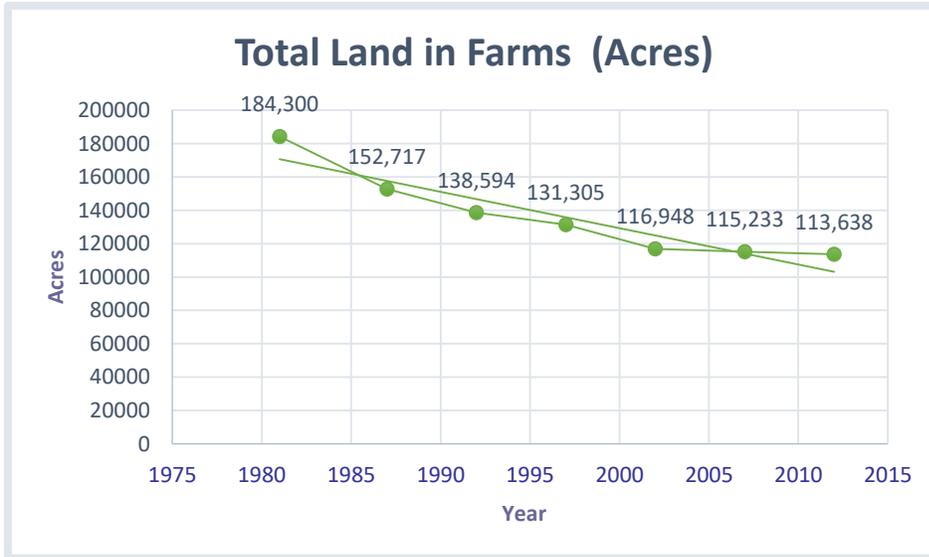
Average Farm Size

The average farm size in Chisago County increased a total of 44 acres from 1977 to 1992 but declined from 178 acres in 1992 to 124 acres in 2002. The recent trend has shown the average farm size in the county increasing from 133 acres in 2007 to 137 acres in 2012. For the total 25-year time span (1987 – 2012), the average size of farms dropped 36 acres from 173 acres in 1987 to 137 acres in 2012.



Total Land in Farms

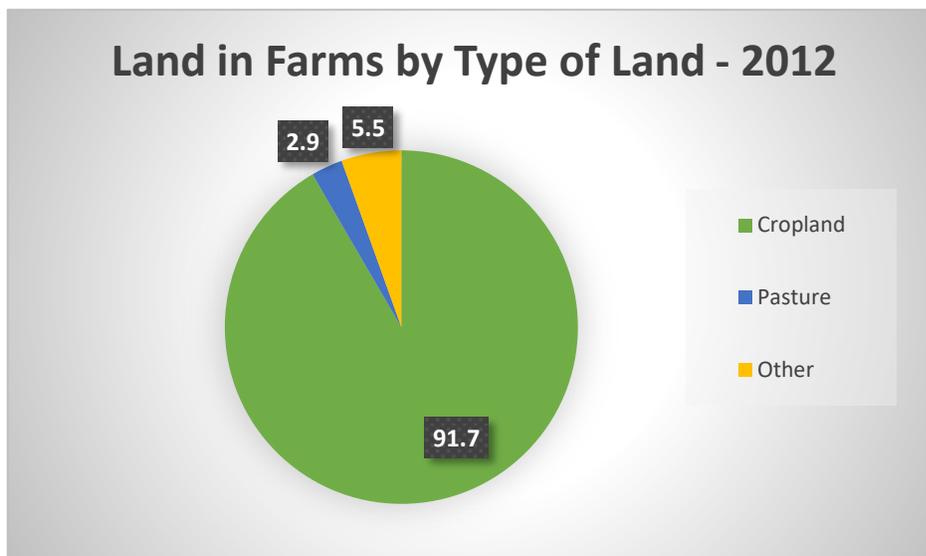
The total land in farms in Chisago County decreased over the 25 years from 1987 to 2012. The total amount of land in farms during that time period decreased by 39,079 acres or roughly 26%. This rate of decrease slowed in recent years as the economy slowed down and development pressures lessened.



Land in Farms by Type of Land

The settlement of farmland has generally been uniform throughout the county. However, farmers learned that the south and north-central areas of the county were more suited for general farming and presently many of the more productive farms are located in these areas.

In 2002, the Land in Farms by Type of Land showed cropland at approximately 69%, woodland at 15%, pasture at 6% and other uses at 10%. As the pie chart below shows, the mix of type of farm land in 2012 showed cropland at 91.7 %, pasture or grazing at 2.9% and other uses at 5.5%



Farm Diversity

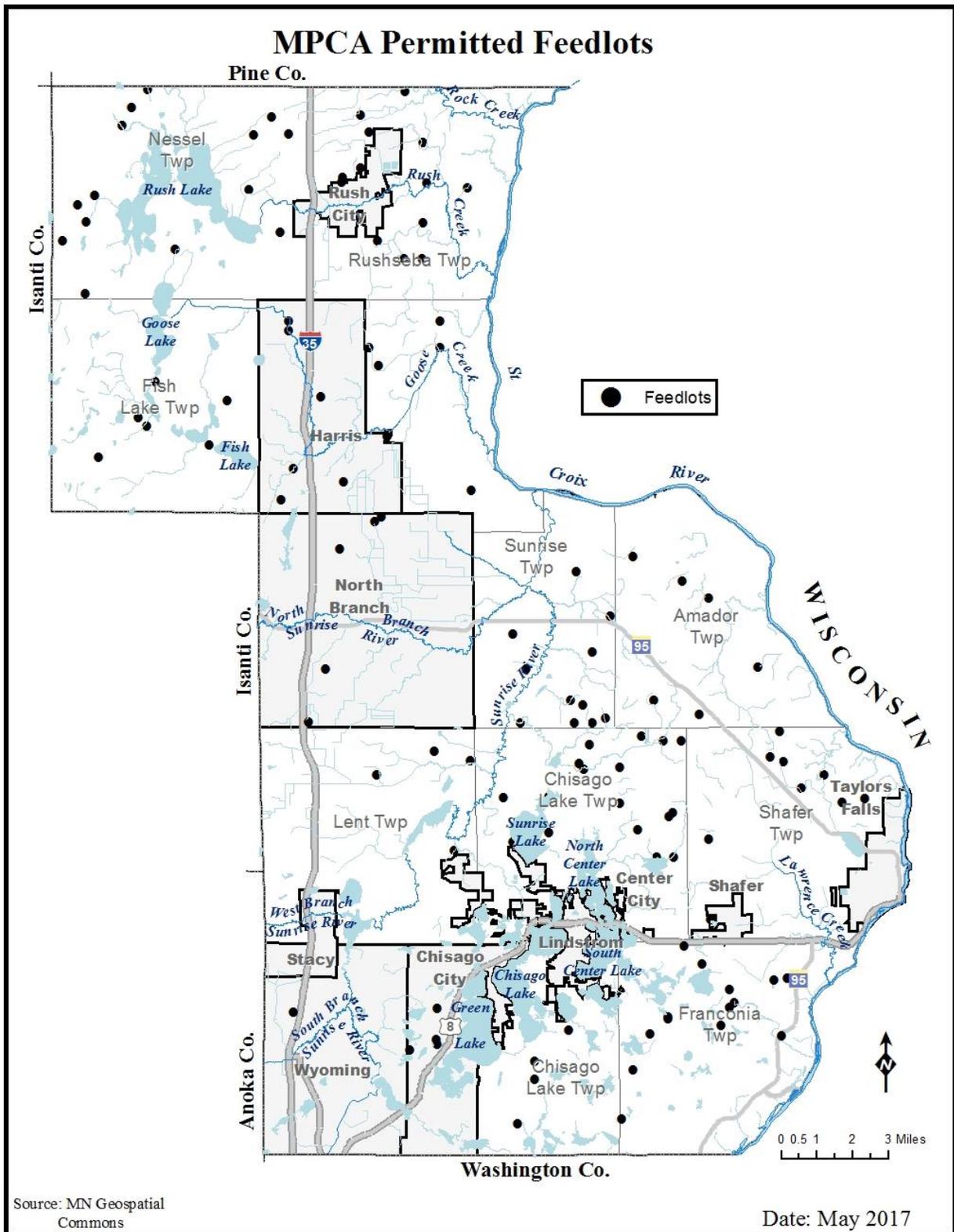
Farm diversity in Chisago County has included the production of cultured sod and Christmas trees. Some farms in the county are characterized by newly opened lands that have organic soil types. These soils are suitable for commercial sod production. Sod production appeared in the 1960's and continues to utilize between 1,000 and 2,000 acres in the county. Tree farming was usually done on a small-scale basis utilizing land that was not well suited for crop production. Market structure, environmental conditions, cultural practices and over production were some of the limiting factors for effective Christmas tree production in the county. It is not known exactly how many acres of land have been used for growing Christmas trees.

Feedlot Inventory

Minnesota State Rules require anyone with, or intending to construct, a livestock facility containing over 50 or more animal units (10 or more animal units in shoreland) to be permitted by the Minnesota Pollution Control Agency. Animal units are defined by the size and species of animal. The table below shows the number of registered feedlots in each township and city as of July 1, 2016 and page 5-15 is a map showing the general locations of registered feedlots.

Township/City	# of Registered Feedlots
Amador	7
Chisago Lakes S	6
Chisago Lakes N	18
Fish Lake	4
Franconia	11
Harris	3
Lent	4
Nessel	15
North Branch	5
Shafer	9
Sunrise S	7
Sunrise N	4
Rushseba	9
Wyoming	1
<u>Chisago City</u>	3
Total	103

Source: MPCA Registered Feedlot Inventory Database - 2016



Agricultural Importance

Agriculture has been an important element in the development of Chisago County. It is significant that agriculture prevailed even when confronted with many technological, economical, governmental and societal changes. Even in 1973 the County recognized the role agriculture would have in the future would depend upon developmental potential in the county and its ability to adapt to the changes. Agricultural importance, prosperity and feasibility are and will continue to be questioned when confronted with persistent land use alternatives.

In this light, the following agriculture contributions to the total environment deserve strong consideration in determining the development patterns of Chisago County in the foreseeable future.

1. Society needs agriculture.
2. Agriculture is an important economic function in the county.
3. Farming can be a profitable enterprise.
4. Agriculture can provide product diversity.
5. Various soils of the county are well suited for agriculture.
6. Farmland contributes to the aesthetic value of the landscape.
7. Farmland will preserve open space.
8. Agriculture influences harmony between various land uses.
9. Agriculture will conserve natural resources.

Heritage and quality of life also are important considerations when determining the role agriculture and the farmer have in the county's future environment and development.

Economic Aspects

Commercial farming occupies an important role in the local economy of the County. However, due to urban growth, hobby farms, land speculation and national economic situations, farmland is being converted and permanently taken out of production. This is due to marginal lands being converted to agriculture to replace the traditionally cultivated to land lost to other uses. The conversion of these marginal areas for farmland is less desirable than the preservation of the traditionally cultivated lands due to the loss of woodlands, wetlands, wildlife habitat, open space and the requirement of additional energy, pesticides, herbicides and fertilizer to make these marginal lands productive. These necessary actions increase the cost of production resulting in a lower net profit, thus negatively impacting the local economy.

The economic future of agriculture in Chisago County has been and will be influenced by the following conditions:

1. The increasing urbanization.
2. The decline in the number of farms.
3. The general decline of farm acres in the county.
4. Changing land values.

5. Increasing farm expenditures together with small profits realized by farm operators.
6. Ability to adapt to changing farm practices.
7. Ability to physically alter the agriculture land.
8. Amount of farm credit available.
9. Variability of prices for farm commodities.
10. Government farm subsidies.
11. Land rental rates.
12. Production levels.

Every farmer is running a business and every one of those businesses is an important economic contributor to the life of the community and county. When net farm income is lower, it causes farmers to cut back on their spending. They have less money to spend on farm equipment, fertilizer, barns and other buildings. Low commodity prices also put a squeeze on cash rents for land that many farmers or their families depend on for income.

Urbanization is having a strong effect upon agriculture in Chisago County. There was an increase in population in Chisago County of 23,736 in the period from 1990 to 2010 (30,151 to 53,887). No doubt this means that some of these new people now live on land that was once farmland. The urban expansion also can create higher land values. These attractive land values also have encouraged farm operators to sell their land, causing a decline in the number of farms.

Development and redevelopment patterns

Development on undeveloped or agricultural land – greenfield development – traditionally costs developers or builders less because the costs of a redevelopment site (with demolition or pollution remediation) can be higher. However, development on greenfields often has higher long-term public costs because it requires extending infrastructure to new areas (that then require public money to maintain). On the other hand, infill development and redevelopment require less new infrastructure but can cost more for the developer up front, both in the direct costs of demolition and pollution remediation as well as the increased complexity of integrating projects into existing neighborhoods. Over the long-term, proportionately more infill development and redevelopment compared to greenfield development will result in denser, more compact cities and urban areas, minimizing the loss of agricultural land, reducing travel distances and enhancing the ability of the county and region to support public transit and services. Based on these factors and concerns, preserving prime or the most productive farmland and from urban or suburban-style development should continue to be a goal and a policy of Chisago County. In addition, the County should encourage development of a more-intense, suburban-style nature in areas with urban services and public utilities.

Agricultural Goals & Policies

Goal: Preserve and conserve prime or the best agricultural land and related natural resources in order to maintain farms and farm related economy as economically viable in Chisago County.

Policies:

1. Provide incentives to transfer development credits from land that is classified as prime farmland.
2. Farms where transfer of development rights occurs should submit a conservation plan that would encourage and promote best management practices.
3. Promote and encourage the use cluster-style development as an incentive and a tool to help preserve highly valued or prime farmland (based on the Crop Productivity Index (CPI)) for agricultural pursuits.
4. Promote the health and vigor of Chisago County's agricultural base in a manner that is consistent with the ecological integrity of the soil and water systems and the well-being of the County's lakes and other water resources.
5. Encourage the preservation of highly valued or prime farmland for agricultural pursuits without restricting a farmer's or property owner's freedom to make economic decisions that impact their families.
6. Encourage and support agricultural businesses that contribute to economic activity, employment and the tax base of Chisago County.
7. Promote farm, commercial recreation and rural retail tourism businesses as a method to bring dollars into the Chisago County economy.
8. The County should take actions to ensure farmers' abilities to maintain their farms and to provide a variety of farming opportunities.
9. Discourage development of non-farm uses on high-value or prime farmland and ensure that if such uses are allowed that they do not cause adverse impacts on farm uses.

Goal: Encourage the preservation of open space and natural resources.

Policies:

1. Promote cluster development to preserve open space and sensitive natural resources.
2. Encourage the use of transfer of development rights countywide.
3. The County shall continue to use a Purchase of Development Rights program and/or conservation easements program to encourage the preservation of agricultural land, open spaces and sensitive natural resources.

Goal: Prevent incompatible land use in agricultural areas and encourage urban land uses in or near incorporated areas to help maintain the ability of owners to operate farms economically in Chisago County.

Policy:

1. Hobby farms should be encouraged and specialized farming provided opportunities to maintain and grow.
2. Provide standards to protect new and existing agricultural land uses in agricultural areas from incompatible land uses.
3. Adopt land use regulations that will locate incompatible uses away from agricultural areas to minimize conflicts.
4. The County should carefully consider allowing incompatible non-farming activities in agricultural areas and shall limit land divisions to those compatible with agricultural needs and activities. The primary tools to accomplish these goals are agricultural zoning and land division standards.

ECONOMIC DEVELOPMENT ELEMENT

September 2017



Chisago County Comprehensive Plan 2017

Economic Development

Introduction

A strong, healthy business community is critical to the long-term well-being of Chisago County. Business is one of the key foundations to the high quality of life experienced in the county – both directly in the jobs it generates for the residents and indirectly through a diversified tax base that provides necessary resources. A healthy economy promotes the expansion and retention of existing businesses. It also encourages new business to consider locating in Chisago County. This, in turn, provides county residents with increased job opportunities and more buying power to support local businesses. It is essential the County establish and maintain economic and redevelopment strategies that are continually reviewed and modified to reflect changes in market conditions, service demands, resource allocation and current opportunities.

Chisago County's economic base, like its land use, changes dramatically from one part of the County to the other. The County's economic roots in agricultural production are quite evident over much of the area, where agriculture still plays a primary economic role as it has for more than a century. The County's urban areas have, over the last 30 years, transformed from small towns and cities with strong agricultural ties to a more diverse economy that is closely linked to the Twin Cities metropolitan area.

Chisago County, when considered as a single entity, demonstrates diversity in its economic base. A diverse economic base lowers the risk of economic difficulty by distributing the effects of industry-specific cycle across the broader range of industries. This element examines the diversity of the County's economic base and the trends occurring in the County as a whole. The economic base is examined from the perspective of:

- The kinds of jobs located in the County;
- The wages paid by businesses located in the County;
- The businesses sales or value of products and services offered by businesses in the County.

Viewing the County as a single, unified economic entity does not reflect, however, the shape and reach of markets that drive the economic base of its distinct sub-areas. The county's geographic size also limits the usefulness of using County-wide statistics for many of the policy discussion that must occur within the Comprehensive Plan update process.

The County's demographic trends reflect the changes of the County's economic base. The economically transformative decades were between 1960 and 2000, when many agricultural areas saw steady transformation with a decreasing number of farms and the towns and cities saw population growth. Much of this increasing population was due to the burgeoning relationship between the County and the Twin Cities metropolitan region.

What is Economic Development?

Economic development has different meanings to different people. The International Economic Development Council (IEDC) definition of economic development fits Chisago County's unique mix of social, geographic, political and economic qualities:

No single definition incorporates all of the different strands of economic development. Typically, economic development can be described in terms of objectives. These are most commonly described as the creation of jobs and wealth and the improvement of the quality of life. Economic development also can be described as a process that influences growth and restructuring of an economy to enhance the economic well-being of a community.

The primary goal of economic development is to improve the economic well-being of a community through efforts that entail job creation, job retention, tax base enhancements and quality of life. As there is no single definition for economic development, there is no single strategy, policy or program for achieving successful economic development in Chisago County. The role of government in economic development must be viewed in both a short and long-term perspective. That is, with any economic development plan or strategy, the focus is on short-term actions that support and sustain a long-term investment.

Economic development is carried out by organizations such as economic development authorities (EDA's), cities, port authorities, industry associations, the Minnesota Department of Employment and Economic Development (DEED), nonprofits, counties, chambers of commerce and businesses. Economic development includes many functions and disciplines – business development, marketing, infrastructure (roads, water, sewer, and fiber), real estate/ land use and finance.

Why is Economic Development Important?

Counties are responsible for providing core services, such as human services, criminal justice, public welfare and infrastructure. To ensure the delivery of these essential services, support job growth and maintain a healthy revenue base, Chisago County and all counties invest in economic development activities. Counties with strong economies have the financial resources necessary to support the services their residents need and desire. County economic development initiatives capitalize on the networks of public, nonprofit and private partners for successful economic development. The dynamics within the County economy affect the capacity of the County government to deliver services. County resiliency is based on the strength of the County economy. The ability of the County to thrive through changing physical, social and economic conditions depends on the prosperity of county residents, the success of local businesses and the availability of financial resources.

Economic development cannot be done in a vacuum – it is based on relationship building, partnerships and collaboration. Chisago County's and Minnesota's economic development and growth depend upon the independent actions of many players, the overwhelming majority of whom operate in the private sector. Yet government also

plays a vital role as a strategic investor. Local government plays an essential role in local economic development. While the government does not create private-sector jobs, it can create an environment that encourages economic and job growth. The County can encourage economic growth by supporting the efforts of local communities, building programs and providing tools to compete for quality jobs, leveraging programs offered by partners and building strong relationships and coalitions with organizations that support economic improvements and overall County vision.

Public sector involvement in economic development arises from concerns about positive and negative spillover effects of development, failures in the information marketplace, existing but underused public infrastructure and private resources, the social impacts of growth and development and the political impacts of economic stagnation or decline. Chisago County recognizes the need to encourage continued investment into its economy. A strong business base supports the residential, retail and commercial sectors. Companies that require skilled workers pay a living wage (the minimum income necessary for a worker to meet their basic needs to maintain a safe, decent standard of living), attracting local residents. These residents, in turn, support the commercial and retail businesses within the County by spending their payroll in Chisago County. They also contribute their time to other community activities through volunteerism. Businesses that pay livable wages allow Chisago county residents with the time and the economic resources to invest in their homes and their community.

At its heart, economic development is about building healthy economies in order to have healthy communities. The following are just a few of the ways that economic development helps communities:

Increased tax base: The additional revenue provided by economic development supports, maintains and improves local infrastructure, such as roads, parks, libraries and emergency services.

Job development: Economic development provides better wages, benefits and opportunities for advancement.

Business retention: Businesses feel appreciated by the community and, in turn, are more likely to stay in town, contributing to the economy.

Economic Diversification: A diversified economic base helps expand the local economy and reduces a community's vulnerability to a single business sector.

Self-sufficiency: A stronger economic base means public services are less dependent on intergovernmental influences and alliances that can change with each election.

Productive Use of Property: Property used for its "highest and best use" maximizes the value of that property.

Improved Quality of Life: More local tax dollars and jobs raise the economic tide for the entire community, including the overall standard of living for residents.

Recognition of Local Products: Successful economic development often occurs when local residents and businesses buy and consume locally produced goods and products in the local market to a greater degree.

Why are local economic development benefits important?

First, local economic development benefits are important for political reasons. For cities, counties and states, advancing their own economic development is of central importance as local governments are primarily interested in maintaining the economic vitality of the area for which they are responsible. Secondly, local economic development offers a benefit that is quite valuable to local residents – more and better job opportunities in their home community. Most Americans have strong ties to the familiar places and people of their home community. Some people will of course move if needed to attain greater economic success. Providing more or better jobs in the home community, however, allows local residents to attain greater earning while preserving their valuable ties to their home community.

As explained by economist Roger Bolton, “A sense of place is a concept widely used by geographers, architects and planners. It refers to a complex of intangible characteristics of a place that makes it attractive to actual and potential residents. The returns to the sense-of-place asset are a general measure of security – security of stable expectations and security of being able to operate in a familiar environment and to trust other citizens, merchants, workers, etc. There also is a basic feeling of pleasure at living in a community that has been created by a combination of social interactions in a particular setting. Creating more jobs and better jobs in a local community allows more local residents to stay and economically prosper while preserving and enhancing this important component of human well-being, a strong “sense of place”.

Chisago County Economic Development Guiding Principles:

Market forces are the dominant drivers of the economy. Public policies influence economic development and growth, but they cannot supplant the private sector, nor should they try. Put another way, the private sector is the lead that drives the economy. As such, the County needs to work in partnership with the private sector.

The County should not duplicate or replace the work of cities and other public agencies. To this end, the County will work in collaboration with cities and public agencies and will provide leadership where the County can make the most difference.

The County supports a strong collaborative approach to economic development. No matter the location, new and growing economic development is a benefit to the entire county. Similarly, it is preferable if one city in the county does not steal or cause an existing business to relocate from another city within Chisago County.

The diversity of the County requires an adaptable and open-minded approach to economic development. The distinctive qualities of Chisago County require flexibility.

The County should pursue economic development strategies that take aim at the drivers of economic growth. Smart approaches to economic development will:

- Boost the productivity of key county and regional industries;
- Improve the quality of life to keep and attract talent;

- Encourage entrepreneurship;
- Encourage home-based businesses and rural tourism;
- Expand tourism and recreational activities throughout the County;
- Allow and encourage business market segments that help expand the County's economic base without expanding associated services:
- Focus on industries and occupations that provide high quality, good-paying jobs; and
- Pay attention to industries and businesses whose sales bring new dollars into the County, retain dollars within the region, or otherwise strengthen the County's internal economic connections.

Several entities promote economic development in Chisago County or conduct studies on a regional basis relating to economic development and housing. The following provides a brief summary of the major organizations and their roles.

Chisago County Housing and Redevelopment Authority – Economic Development Authority (HRA-EDA)

The Chisago County HRA-EDA was formed in 1988 and offers a range of resources to public and private sector clients. These resources include:

1. Community Development: including securing and administering local, state and federal grants and loans, project planning, and program implementation;
2. Economic Development: including providing assistance to local units of government in Chisago County by financing the acquisition of commercial/industrial land, providing tax increment financing and tax abatement assistance and offering incentives to business looking to expand in or relocate to Chisago County;
3. Housing Development and Rehabilitation: including administering rehabilitation programs for multi-family and single family rehabilitation, multi-family and single family housing development and construction, and home purchase assistance; and
4. SBDC Services: The HRA - EDA is a Small Business Development Center (SBDC) satellite office. They provide free and confidential consulting services to business and those thinking of going into business. Services provided include: Access to capital and loan packaging; financial analysis and assessment; cash flow management; business plan development; general marketing; start up assistance; expansion assistance and relocation assistance.

The Chisago County HRA-EDA has a full-time Director that administers the programs for a five-member board and two County Commissioners serving as liaisons. In 2002, the HRA-EDA began using its levy authority for ongoing operations of the HRA-EDA and for the business development land acquisition program. Some incentives now offered by the EDA for development include: tax increment financing, employee and management training programs, revolving loan funds, programs available through the Minnesota Department of Employment and Economic Development (DEED) and SBA financing.

East Central Regional Development Commission

The East Central Regional Development Commission was organized by petition of local units of government in the year 1973. Formation of regional development commissions - RDCs - is authorized under the Regional Development Act of 1969. The Minnesota Legislature passed an updated Regional Development Act in 1997. There are 13 development regions in the State of Minnesota. Twelve of the development regions were created by executive order of the Governor in 1969.

Chisago County is part of the East Central Regional Development Commission along with the counties of Isanti, Kanabec, Mille Lacs and Pine. The mission of this commission is to provide leadership and direction through creative problem solving by initiating projects and programs that lead to creative solutions to regional problems, by providing technical assistance and by identifying and developing available resources. The East Central Regional Development Commission provides a leadership role as an advocate for East Central Minnesota to bring about positive change.

Besides economic development technical assistance, the ECRDC has a gap lending loan program and a micro lending loan program for business expansion. The ECRDC also has a direct link to the Federal Economic Development Administrations (EDA) grant programs that assist communities attract and retain businesses.

Initiative Foundation

A network of regional non-profit foundations was established in the mid-1980s across the State of Minnesota. The general mission of these foundations is to strengthen the communities and the people that live there through leadership training, grant making and business development. The Initiative Foundation, formerly the Central Minnesota Initiative Fund, was formed in 1986 and it serves 14-county area in central Minnesota including Chisago County. A board of directors governs the group and its main office is in Little Falls.

In 1995, the Initiative Foundation prepared a regional economic development strategy and overall vision. The vision developed for the region was to:

“Build on its many strengths in order to address concerns related to wages and opportunities, education and job skills, enterprise development, sustainable development and quality of life and physical infrastructure. Specifically, the region hopes to improve wages and job skills; increase job opportunities through business development, expansion, and attraction; and address physical infrastructure concerns that hinder economic development. The vision will be achieved through partnerships and cooperation.”

According to their website, the Initiative Foundation works daily to strengthen the economy and communities of Central Minnesota through:

- Loans and financing, we invest in businesses that create quality jobs.
- Grants and programs, we invest in organization that make our society strong.
- Donor services and charitable funds, we help people invest in their communities.

The Initiative Foundation originally developed several specific actions aimed at helping the region attain the above vision including the following:

- Develop a program that encourages the development, attraction and expansion of firms that provide living wages.
- Make seed capital and equity for starting and expanding businesses more widely available.
- Target gap lending to areas of high unemployment and low income.
- Increase competition for workers by encouraging high skill/high wage industries to locate, develop or expand in the region.
- Develop a strategy that maximizes the region's comparative advantage, a program that strengthens industries in which the region has a comparative advantage.

For 2017 – 2019, the Initiative Foundation has set the following work priorities:

- Support and grow existing for-profit and nonprofit businesses.
- Help new entrepreneurs and the start-up of businesses and social enterprise ventures.
- Improve the economic status of financially disadvantaged people.
- Enhance kindergarten readiness for children (ages 0-5) living in poverty.
- Cultivate the next generation of leaders (ages 40 and under) working and living in our region.

GPS 45:93

GPS 45:93 is the new name of the organization formally known as Northern Technology Initiative (NTI). GPS 45:95 is a non-profit organization dedicated to growing and attracting businesses with high paying jobs to the 5-County (Chisago, Pine, Kanabec, Isanti and Mille Lacs) region of East Central Minnesota. They are a regional economic development consortium strategically located along Interstate 35 between Minneapolis/St. Paul and Duluth. This makes it an ideal location for those companies serving the Twin Cities and Duluth areas.

The Mission Statement of GPS 45:93 is “Collaborate to strengthen the regional economy by:

- Providing a regional approach to workforce development, business attraction, retention and expansion.
- Acting as a conduit for members and the region to access resources and educational opportunities.”

GREATER MSP

In 2011, Greater MSP was created to provide a regional approach to economic development. Greater MSP (Minneapolis Saint Paul Regional Economic Development Partnership) is a private, non-profit (501c3) organization dedicated to providing public and private sector leadership, coordination and engagement to grow the economy of the 16-county MSP region, including Chisago County. Greater MSP's mission is to

accelerate job growth and capital investment in the 16-county region. Working with a broad array of partners and investors, the Greater MSP staff, Board and Partner Advisory Council have developed the region's first Regional Economic Development Strategy, based on three key pillars: 1) *Telling "Our Region's Story."* 2) *Retaining and attracting key talent with the launch of Make It. MSP,* and 3) *Building our "Sectors of Strength" for global leadership.*

The Greater Minneapolis Saint Paul Region is positioned to lead the world in solving its most important challenges, now and in the future. Safe and abundant food, clean water and health solutions will drive the global economy in the coming years. As a leader in these technologies and industries, the region has the R&D, financial and business service infrastructure to support them. Our highly educated and culturally connected workforce will create and contribute to businesses' success. Our quality of life and commitment to community will sustain that success. Businesses prosper here — because people prosper here.

City Economic Development Programs

Several communities in Chisago County have economic development or housing and redevelopment programs. North Branch, Wyoming, Chisago City, Rush City and Lindstrom all have an Economic Development Authority. Taylors Falls has an Economic Development Commission.

America's Best Cities (ABC) Competition

In addition to the cities and their programs listed above, the cities of Chisago City, Lindstrom, Center City, Shafer and Taylors Falls, along with nearby townships and the Chisago Lakes School District, all started working together in 2015 as one community in the America's Best Communities (ABC) competition. The contest, sponsored by Frontier Communications, Dish, CoBank and The Weather Channel, has involved several steps, objective and goal development and plan creation to show how this one "community" is one of the best communities in all of the United States. To show how the Chisago Lakes area is one of the best communities in the United States, the group has been focusing its efforts on how the community continues to prosper by focusing on economic opportunity, community collaboration and a rich quality of life. Through these efforts, the group identified several outcomes or long-term goals they integrated across four focus areas including:

- Arts, Culture and Tourism
- Broadband
- Economic Development
- Quality of Life

The group developed plans with action steps and activities for implementing each of these focus areas. For economic development, the group's economic revitalization plan (dated November 2015) lists the following desired outcomes:

- Stimulate new, high quality job opportunities
- Attract people and investment to Chisago Lakes
- Beautify Highway 8 and fill vacant storefronts

Through the group's hard work and dedication, the Chisago Lakes area made it through several rounds of the ABC competition. The competition started with 350 cities, was narrowed by the judges to a top 50 (which earned the group \$50,000 for use toward further developing their plans). In January 2016, Chisago Lakes area was named one of 15 semi-finalists and in April 2016 they were named as one of the eight national finalists (which earned the group another \$100,000). Since earning that prize, the collaboration used the money toward implementing the goals and objectives in their economic revitalization plan. As one of the eight finalists, they competed in April 2017 for the top prize of \$3,000,000 to use toward further implementation of their economic revitalization goals and plans for the Chisago Lakes area. Unfortunately, the collaboration found out in April 2017 that they did not win one of the three top prizes in the competition.

Overall Economic Development Issues & Baseline Information

Employment Conditions & Workforce:

Employment conditions in the Chisago County area are favorable for expanding employers. Businesses can count on a growing workforce with a Chisago County location. The population of Chisago County is expected to increase 25% between 2015 and 2030 (from 54,293 to 68,071). In addition, Chisago County is easily accessible to the Twin Cities and to the highly skilled and educated workforce in the Twin Cities Area.

Labor and Employment Characteristics – 2014

Chisago County

Minnesota

	In Labor Force	Labor Force Partic. Rate	Unemploy. Rate	Labor Force Partic. Rate	Unemploy. Rate
Total Labor Force	29,213	69.2%	6.0%	70.1%	6.5%

Source: 2010 – 2014 American Community Survey, 5-Year Estimates

Chisago County Labor Force Projections – 2015-2025

	2015	2025	2015 – 2025 Change (Numeric)	2015 – 2025 Change (Percent)
	Labor Force Projection	Labor Force Projection		
Total Labor Force	32,515	33,804	1,289	4.0%

Source: Minnesota State Demographic Center and 2010-2014 American Community Survey

Chisago County Total Available Labor Force and Population Estimates

Year	Total Annual Average Number in Labor Force	County Population
2000	23,250	41,101
2010	29,314	53,887
2015	28,963	54,293

Source: Deed Laus Program and US Census

Annual Unemployment Rates

	<u>Chisago County</u>	<u>Minnesota</u>
2000 Annual Average	3.7	3.2
2010 Annual Average	8.9	7.4
2015 Annual Average	4.2	3.7

Source: Deed Laus Program

Chisago Industry Employment Statistics – 2015

	2015 Annual Data	2015 Annual Data	2010 - 2015	2010 - 2015
	Number of Firms	Number of Jobs	Change in Jobs	Percentage Change
Total, All Industries	1,060	14,855	1,477	11.0%
Construction	181	860	176	25.7%
Manufacturing	90	2,777	962	53.0%
Retail Trade	143	1,688	178	11.9%
Health Care and Social Assistance	86	3,637	91	2.6%
Educational Services	17	1,341	19	1.4%
Accommodation and Food Services	73	1,124	-27	-2.3%
Other Services	107	389	36	10.2%
Public Administration	38	1,047	50	5.0%

Source: DEED Quarterly Census of Employment and Wages program

In 2014, about 77 percent of Chisago County's working residents commuted outside of the area to work everyday. Due to great transportation access, residents of Chisago County enjoy both the atmosphere of a smaller community and the resources of a metropolitan area.

2014 Commute Shed (Counties where
Chisago County workers are employed)2014 Labor Shed (Counties where
workers in Chisago County live)

Commute to:	Percent
Chisago County, MN	23.4%
Ramsey County, MN	18.9%
Hennepin County, MN	18.1%
Washington County, MN	10.0 %
Anoka County, MN	9.4%
Isanti County, MN	4.5%
Dakota County, MN	3.2%
Polk County, MN	1.7%
Pine County, MN	1.6%

Commute From:	Percent
Chisago County, MN	50%
Ramsey County, MN	2.8%
Hennepin County, MN	2.1%
Washington County, MN	7.5%
Anoka County, MN	9.9%
Isanti County, MN	7.8%
Dakota County, MN	0.7%
Polk County, MN	4.1%
Pine County, MN	5.6%

Source: US Census Bureau, Center for Economic Studies

Commercial/Industrial Tax Base

Maintaining a healthy tax base is an important function of government.

The table below shows data from the League of Minnesota Cities for tax base composition of each city comparing the years 2000 and 2016.

Existing Tax Base Composition, Percent Market Value Commercial/Industrial

City	2000	2016	% change 2000-2016
Harris	5.05%	10.12%	+5.07
Center City	6.61%	12.17%	+5.56
Taylor's Falls	8.00%	7.84%	-0.16
Lindstrom	9.38%	8.16%	-1.22
Chisago City	9.92%	8.02%	-1.90
North Branch	11.8%	16.25%	+4.45
Wyoming	14.26%	16.84%	+2.58
Stacy	17.42%	24.35%	+6.93
Statewide Ave.	19.85%	18.65%	-1.2
Shafer	21.20%	12.62%	-8.58
Rush City	22.26%	27.50%	+5.24

Source: League of Minnesota Cities

Existing Tax Base Composition, Percent Market Value Commercial/Industrial

	2002	2016	% change 2002-2016
Chisago County	5.33%	8.0%	+2.67
Statewide Ave.	15.31%	12.75%	-2.56
Metro Counties Ave.	19.81%	15.01%	-4.80
Non-Metro Counties Ave.	8.94%		

Source: Minnesota Department of Revenue

With the commercial/industrial tax base of Chisago County being only 5.33% in 2000, there was concern that with the addition of the rapidly expanding residential development, steps needed to be taken to maintain a healthy balance to ensure an acceptable residential tax rate. As noted above, by 2016, the commercial/industrial tax base in Chisago County had grown to 8 percent of the market value – an increase of 2.67 percent from 2000. While this increase is a good trend, Chisago County needs to analyze and develop an optimum goal for maintaining a healthy balance in tax base. In any case, it is evident an increase in the commercial/industrial development (to 13 – 18 percent of the County’s market value) is necessary in Chisago County. Chisago County would like to see the majority of new commercial/industrial development occur within municipalities where adequate transportation facilities and public water and sewer services are available. Other options should also be looked at including potential commercial/industrial development along I-35 at activity and/or transit centers, and establishment of mixed-use rural village centers at historical unincorporated villages.

In July 2014, Greater MSP released the results of a Business Retention Study of businesses in Chisago County. They received 116 survey responses from businesses located throughout Chisago County. The largest number of survey responses came from businesses in retail trade (29%), manufacturing (22%), other services (10%), health care/social assistance (9%) and financial/insurance (6%).

The surveys reported:

65 businesses had about the same number of jobs and 41 had increased the number of jobs over the past year.

60 businesses expected to keep their number of jobs about the same and 38 expected to increase their number of jobs.

39 businesses had no plans to make major investments, 35 had plans to renovate or expand their current facilities and 34 said they were planning on making major equipment purchases.

61 businesses reported increased sales over the past year and 32 said their sales had been relatively stable over the past year.

54 percent said that their primary market was local, 17 percent said their primary market was the Midwest (including Minnesota) and 11 percent said their primary market was Minnesota.

For community rankings and amenities, those responding indicated that recreational opportunities, K-12 education, crime rate, social organizations and networks and electric reliability were the five highest-rated amenities or attributes for doing business in Chisago County. These are amenities and features of life in Chisago County the County and cities should promote as strong points or reasons to do business in Chisago County.

The surveys also showed local taxes, public transportation, telecommunications/broadband service and rates and customized training programs were the five lowest ranked amenities or attributes of doing business in Chisago County. These are issues the County and cities should work to improve to better life for residents and improve the business climate in Chisago County.

The number of businesses in Chisago County is growing. Businesses in Chisago County benefit from the advantages insofar as suppliers, distributors and services in the Twin Cities are only minutes away. In addition, Chisago County itself has businesses that can provide the services a company might need. There are 21 computer systems design and related services firms, 18 scientific and technical consulting services firms, as well as 11 engineering and R&D services firms in Chisago County. In the last couple of years, there have been large expansions at Polaris Industries, Rosenbauer Minnesota and Hazelden. A large expansion for Premier Marine also was anticipated for 2017.

Current Commercial and Industrial Sites and Future Needs

The map on page 6-18 shows the land that as of 2017 was zoned commercial/industrial throughout the County. The total amount of land currently zoned commercial or industrial is approximately 5653 acres. This includes both land in municipalities and land in unincorporated areas.

There are sites currently available in Chisago County that are suitable for commercial/industrial development that have the necessary infrastructure in place. Currently there are approximately 310 acres of land available for commercial and industrial sites.

Chisago County is rich with a variety of industrial sites throughout the county. There are ten industrial parks of which seven have available sites for new development.

Available Industrial Properties:

Center City – County Seat Business Park – Per Road

There are six sites available totaling approximately 20 acres. All utilities are available to the site. Uniqueness of this site is it has two internet providers and two energy providers.

North Branch – Interstate Business Park – Located on County Road 30 and exposure to I-35. It is the largest certified “Shovel Ready” industrial park in the State of Minnesota. There are approximately 200 acres available for development. This industrial park also has rail access on the St. Croix Valley Shortline Railroad.

North Branch – North Branch Industrial Park – Located a few blocks off County Road 30 is the first industrial park in the city. There is one remaining lot available that is nine acres in size. The park is fully served with public utilities.

Rush City – In 2015, Rush City purchased land along County Road 30 and abutting the railroad for a new industrial park. There are three parcels equaling about 35 acres. This industrial park is served by the St. Croix Valley Short Line railroad.

Stacy – Stacy Ponds is accessed off County Road 30. 17 lots range from just under one acre to just under two acres in size. Lots may be combined for larger parcels. The park has all utilities and is ready for development. The business park sits between County Road 30 and the Carlos Avery Wildlife Management Area.

Taylors Falls – The city of Taylors Falls has a ten-acre business park located on County Road 37. The park has full utilities and is parceled into six sites. The city recently received special legislation to provide grants to businesses that develop in the park. The lots go for \$1 as it was funded through tax abatements.

Wyoming – The city of Wyoming and the HRA-EDA jointly own a 14-acre parcel that is currently available for light industrial development. It is accessed from County Road 30 but also fronts Interstate Highway I-35. The park is fully serviced with public utilities.

Other Industrial Sites:

Chisago City – The Chisago City Industrial Park (located on Liberty, west of Lofton Avenue) is currently full. Properties near the park not owned by the city are often considered for future industrial development.

Lindstrom – The City of Lindstrom is in the process of redeveloping a site in their industrial park (on the northwest corner of Newlander Avenue and Akerson Street) that has an old, dilapidated building on it. It is planned to be demolished in first quarter of 2017 that would provide about a total of five acres for industrial development.

Wyoming – Wyoming’s older industrial park (along Fallbrook Avenue, south of Viking Boulevard) has very little land for new development. Mr. Hallberg of Hallberg Marine has developed much of the park. This park has been a location for existing buildings for businesses to consider.

Rural retail tourism and commercial recreation in Chisago County

In 2010 and 2011, the County Planning Commission reviewed and discussed how to best accommodate the growing and changing types of rural retail tourism and commercial recreation businesses wanting to locate in Chisago County. Through several meetings and reviews, the County eventually adopted changes to the Zoning Code on September 21, 2011 that set standards for rural retail tourism businesses. The purpose of the new code (Section 4.15 of the Zoning Code), as stated in the ordinance, are to:

- Preserve and celebrate Chisago County’s archaeological properties, rural and agricultural heritage and historical landscapes;

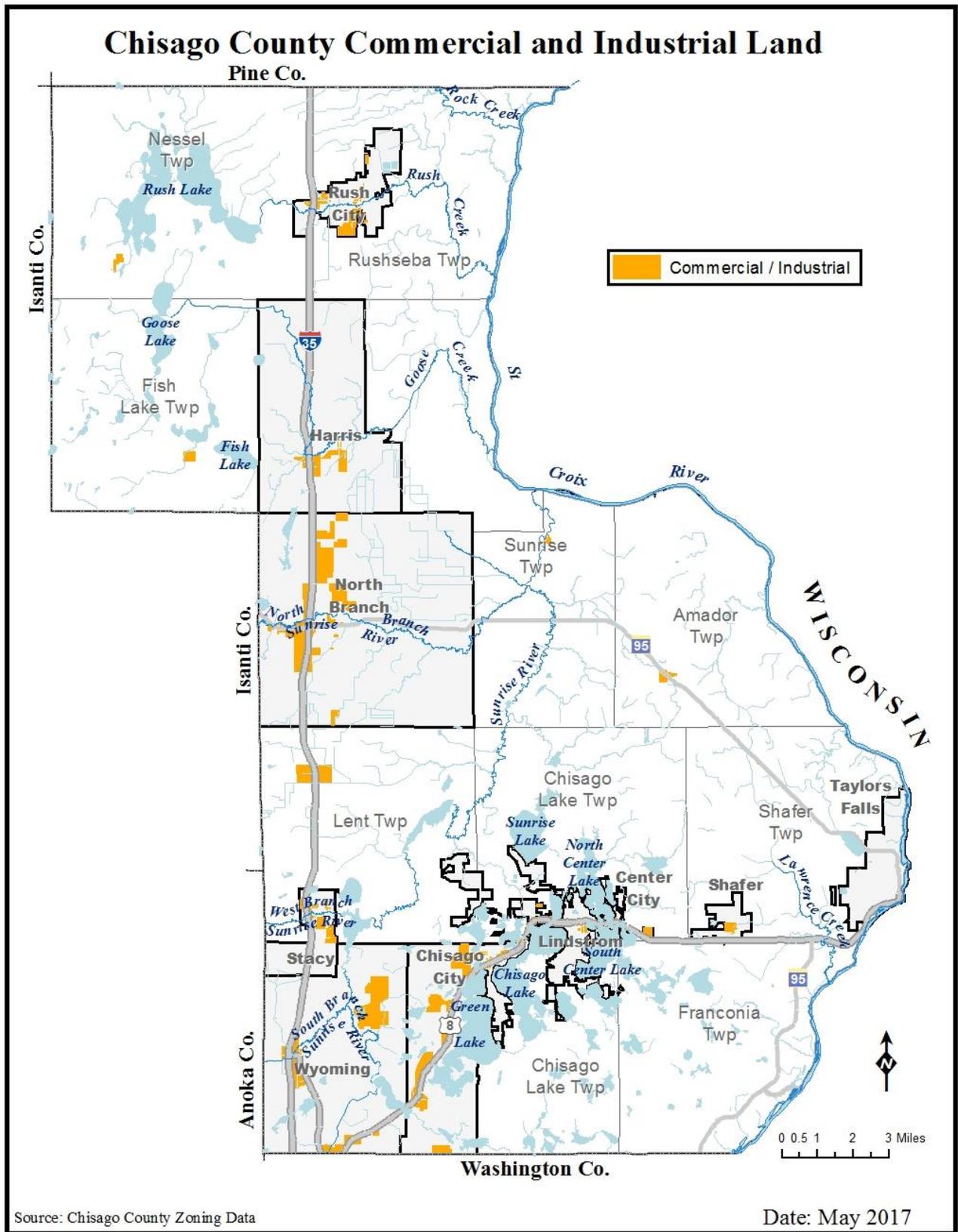
- Recognize Chisago county’s scenic features, exceptional rural ambience and historic sites as desirable local amenities that will draw outside revenue from visitors that is vital to the local economy;

- Enhance Chisago County’s appeal to visitors who are drawn to its rural atmosphere:

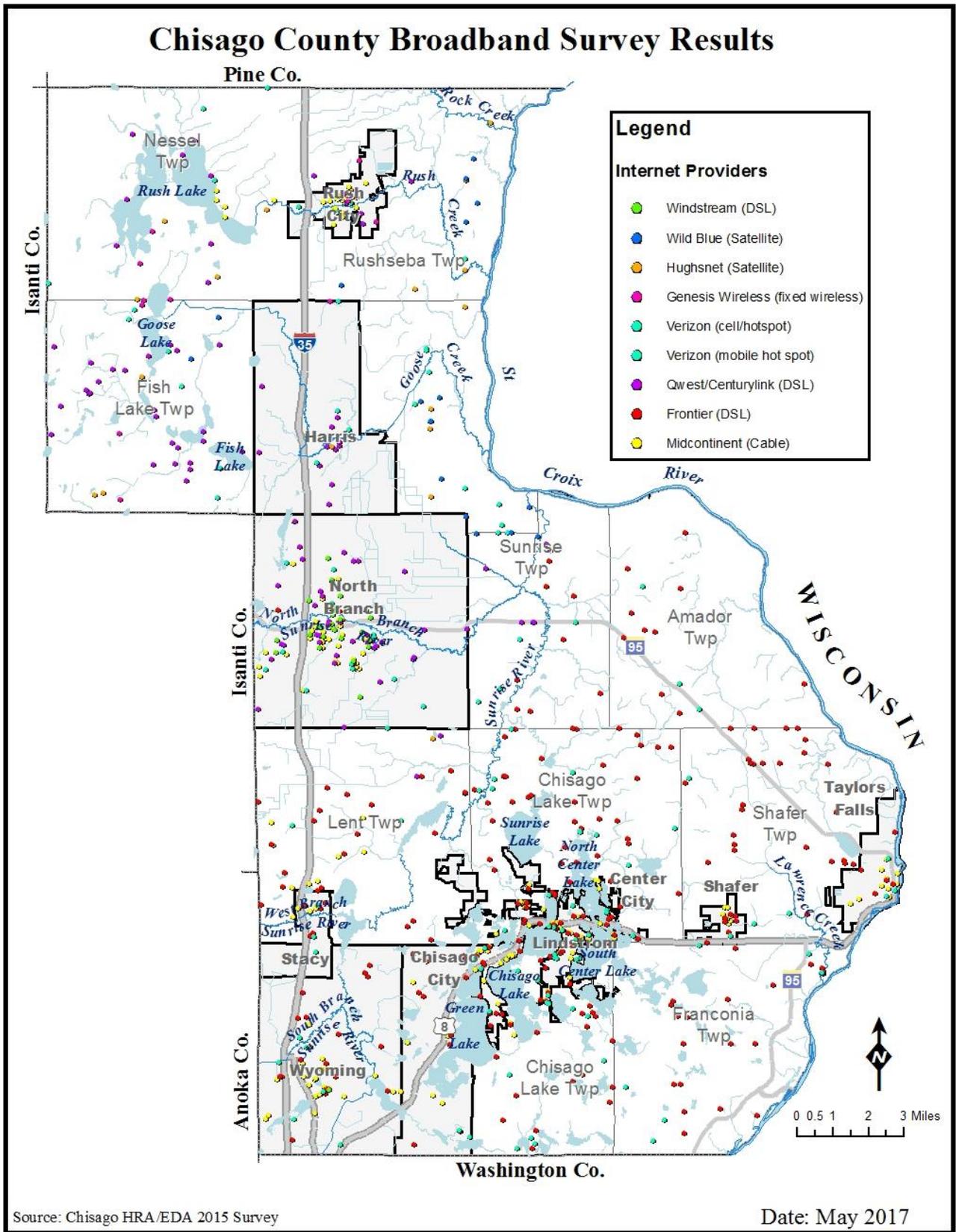
 - Provide opportunities for new economic growth through Rural Retail Tourism businesses: and

 - Assist the County’s citizens in transition from primarily agricultural land uses to an expanded variety of rural business opportunities as active family farming continues to diminish in Chisago County.

From 2010 – 2013, the County approved eight new or amended commercial recreation conditional use permits. As for rural retail tourism, the county approved 16 new or amended conditional use permits between April 2012 and December 2015 for such activities.



Chisago County Broadband Survey Results



Source: Chisago HRA/EDA 2015 Survey

Date: May 2017

The Chisago County HRA-EDA has its own separate Board that approves the goals, policies and work plan of the organization. However, the goals and policies set by this agency should be incorporated into the County's Comprehensive Plan to ensure that the two are working together.

Chisago County HRA-EDA Economic Development Goals and Work plan (below) takes a targeted, proactive approach to business recruitment based on the county's advantages.

- A. Build relationships with commercial and industrial realtors locally and from the Twin Cities market.
 - a. Attend real estate events to grow relationships and market the county's industrial sites and buildings.
 - b. Determine which realtors and associations to work with the targeted businesses and provide them with information about development opportunities.
- B. Develop a focused marketing program, providing industry specific information to prospects.
- C. Maintain a listing of sites and buildings available by working with communities and realtors and have the sites listed on LOIS that will be provided by DEED, GreaterMSP and MNCAR.
- D. Utilize the tagline "A Natural Resource for Business" to target potential business.
- E. Work with legislators to create legislation so the county would be able to compete better with Wisconsin for business development.
- F. Meet with the Saint Croix Valley Short-line Rail to discuss targeted business.
- G. Work with area developers for potential speculative building options.

Assist communities with redevelopment and filling vacant buildings.

- A. Maintain an inventory of buildings and vacant sites on the various databases.
- B. Promote commercial sites/buildings to destination type businesses.
- C. Assist existing businesses with their expansion needs.
- D. Create and promote incentive programs to fill the vacant buildings.
- E. Work with communities and developers to remove/redevelop blighted buildings.

- F. Work with legislators to support funding for the DEED's Redevelopment programs.

Provide financial and technical assistance to businesses located or locating in Chisago County.

- A. Continue to provide Small Business Development Center (SBDC) services as a satellite office through the Central Lakes Community College.
- B. Stay informed of resources for businesses and shares those programs with new and expanding businesses.
- C. Support a regional job fair with DEED.
- D. Work with chambers and communities in business retention and expansion (BRE) visits. Create a rotating schedule of visits.
- E. Use the data provided from the *Sales Force* database to enhance the economic climate of Chisago County.
- F. Use the Shovel Ready criteria in preparation for a timely response to developers, realtors and prospects.
- G. Work with DEED's Labor Force Analyst to be prepared with pertinent information about the labor force and promote programs for workforce recruitment and retention.
- H. Provide and market training opportunities for businesses such as: employment law, lending programs and workforce training opportunities.

Additional County Economic Development Goals & Policies

Goal: Provide for a range of economic diversity and development opportunities to maintain and strengthen the County's economy.

Policies:

1. Promote natural amenities in the County as assets to economic development and business opportunity.
2. Acknowledge tourism's economic value and the contribution of this industry to both the diversity of the County economic base and the potential for growth.
3. Promote tourism and commercial recreation as expanding opportunities for employment and tax base.
4. Encourage the development and installation of high-speed infrastructure to promote and assist telecommuting and E-business in Chisago County.
5. Encourage new commercial and industrial development within existing communities where adequate infrastructure is available, including redevelopment of existing sites and filling of industrial and business parks.
6. Options for potential commercial/industrial development shall be explored along I-35 at activity and/or transit centers.
7. Continue to use and promote the rural village center zoning district established for the historical unincorporated villages to allow for mixed-use development.
8. The County will continue to allow and encourage Home occupations in all zoning districts if performance standards are met.
9. Promote agricultural operations in areas with highest-valued agricultural land or with economically viable animal operations.
10. The County should continue to allow agricultural activities and related agribusinesses in the Agricultural zoning district.
11. The County should promote and support locally produced and sourced agricultural products and businesses.
12. The County should review and modify its economic and redevelopment strategies on a regular basis to reflect changes in market conditions, service demands, resource allocation and current opportunities.
13. Consider zoning ordinance changes that encourage commercial and industrial development while protecting existing residential properties and rural lifestyles in Chisago County.

INFRASTRUCTURE ELEMENT

September 2017



**Chisago County Comprehensive Plan
2017**

Infrastructure

Introduction

The original role of county government was to preserve land records, maintain farm to market roads, keep the peace, provide for the poor and administer a court facility for the traveling circuit judge. Today, the role of county government is much more diverse and complex. With about 330 staff, Chisago County provides services in the areas of law enforcement, criminal justice, courts, public health, building inspections, environmental health, human services, transportation, planning and zoning, libraries, property assessment, elections and taxpayer services. The projected 25 percent increase in the county's population from 54,293 in 2015 to 68,071 residents by 2030 will create additional demand for county services and the state court system. The increase in demands will likely require additional county office space and possibly judicial chambers and courtrooms.

Residents of Chisago County receive public services and have access to public facilities from the County, townships, municipalities and school districts. The availability and location of these services usually has a major impact on the development patterns of a county. The population distribution is usually greater in close proximity to services and facilities as residents desire the convenience of easy access to them. The County locates its facilities in a manner that balances accessibility to the residents, businesses and visitors with providing services in a cost-effective manner. The County also decentralizes the delivery of county services whenever it makes sense.

Local governments providing services and facilities also benefit from a development pattern that has the population served, close to services and facilities. Major public services and facilities include transportation, public water supplies, wastewater treatment systems, schools, health services, police and fire protection and other governmental services.

The county is responsible for providing many other services throughout the County, such as law enforcement, public health, human services, building and environmental regulations and solid waste. While solid waste services are provided by the private sector, Chisago County is responsible for the management of solid waste. Safe and reliable water and sanitary sewer systems are an essential infrastructure component to all communities. Stormwater management also is a topic for communities to address. In addition, there are private systems and services not directly provided by public entities that the County must take into account when analyzing adequacy of existing infrastructure and future needs. This element will attempt to inventory some of the existing infrastructure currently in place; however, a more in depth study would be needed to draw any conclusion as to recommendations for future infrastructure needs.

Transportation

Transportation is one of the main infrastructure items that is a critical element to every jurisdiction. The deterioration of roadway pavement and the aging of public utility systems demonstrate the urgency of investing more in their preservation, maintenance

and rebuilding. Some would argue that it is time to strike a new balance between being good stewards of the infrastructure that the County has and building more. As a result, there is an emphasis on maintaining the public infrastructure that is now in place and maximizing the impact of limited public dollars rather than expanding the existing systems.

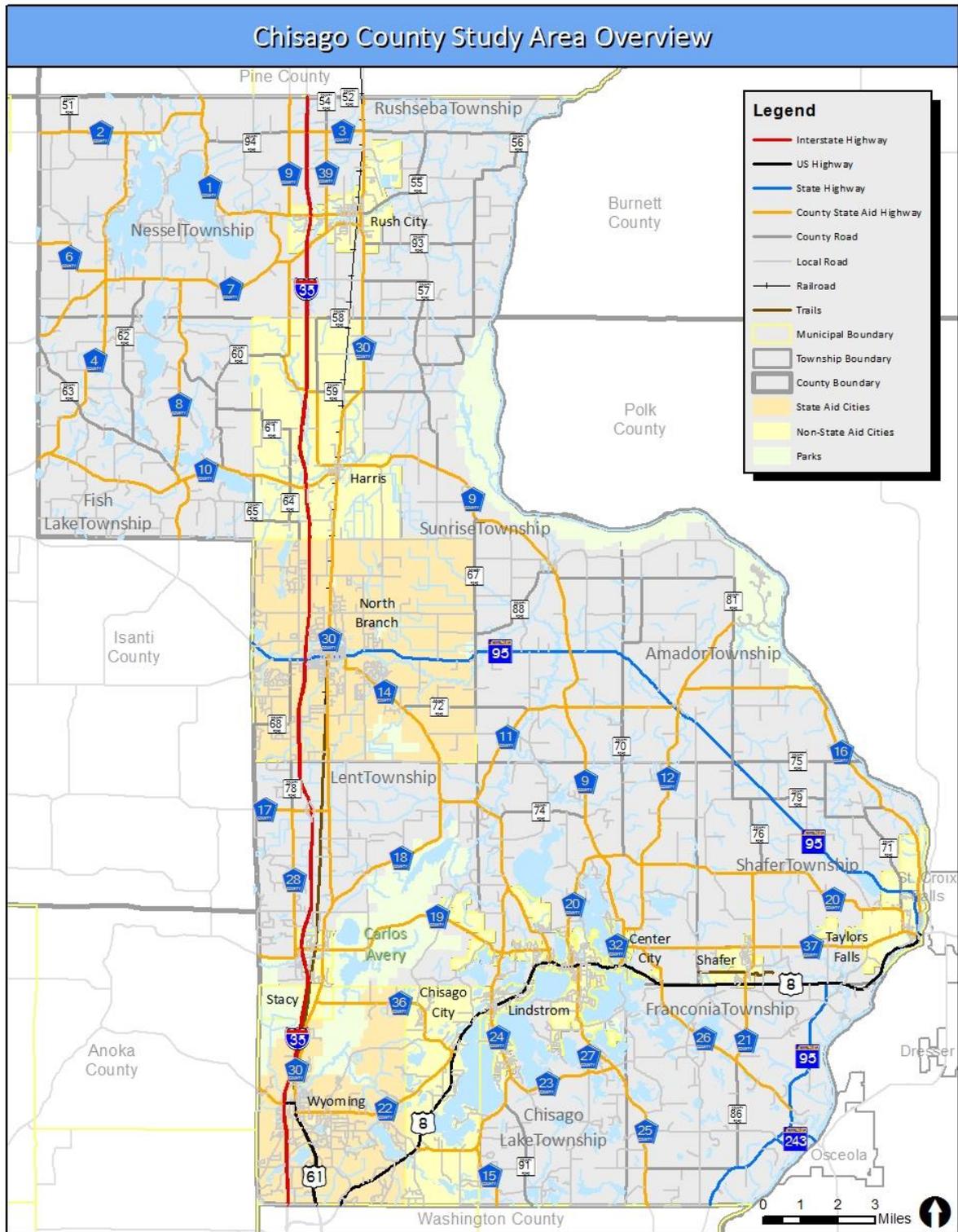
The existing highway system is a significant public investment that must be maintained and preserved for future generations. Concerns about congestion, safety, access and freight movement must be balanced with available funding amounts, sources and long-term sustainability. While some gaps remain, the County's (and regions) principal arterial roadway network is essentially complete and now must be rebuilt. Those rebuilding and replacement needs are increasing while federal, state and local resources for roads and bridges lose ground to inflation. In addition, gas tax revenues are decreasing due to improved fuel efficiency and changing travel patterns. Congestion on area highways, a sign of economic activity, will likely be a reality in the coming years, especially during peak commuting hours. Moving more people and freight on the highway system with limited fiscal resources will require coordinated approaches rather than simply expanding the pavement footprint. Strategic investment in the transportation system will be needed to ease congestion and improve safety and capacity. To accomplish this, the County (and probably the State), will focus its investments on affordable, high-return-on-investment projects such as:

- Placing a priority on safely operating, maintaining and rebuilding the existing County and State highway systems with improvements to better accommodate bicycle and accessible pedestrian travel where appropriate.
- Implementing affordable strategic capacity enhancements.
- Implementing enhancements and improvements to the minor arterial road system.

The intersection of land uses, urban-style development and the transportation system shapes the effectiveness of stewardship of transportation investments. Chisago County should work with local cities and townships to align development patterns and highway investments by focusing growth and investment along highway corridors with the potential for future transit.

The area's highway investments are part of a coordinated, interconnected and multimodal transportation network that safely, reliably and affordably connects people and freight with destinations in the region and beyond. The great majority of the region's freight moves by truck. The County works with the Minnesota Department of Transportation (MnDOT) and local units of government to preserve and improve area roadways.

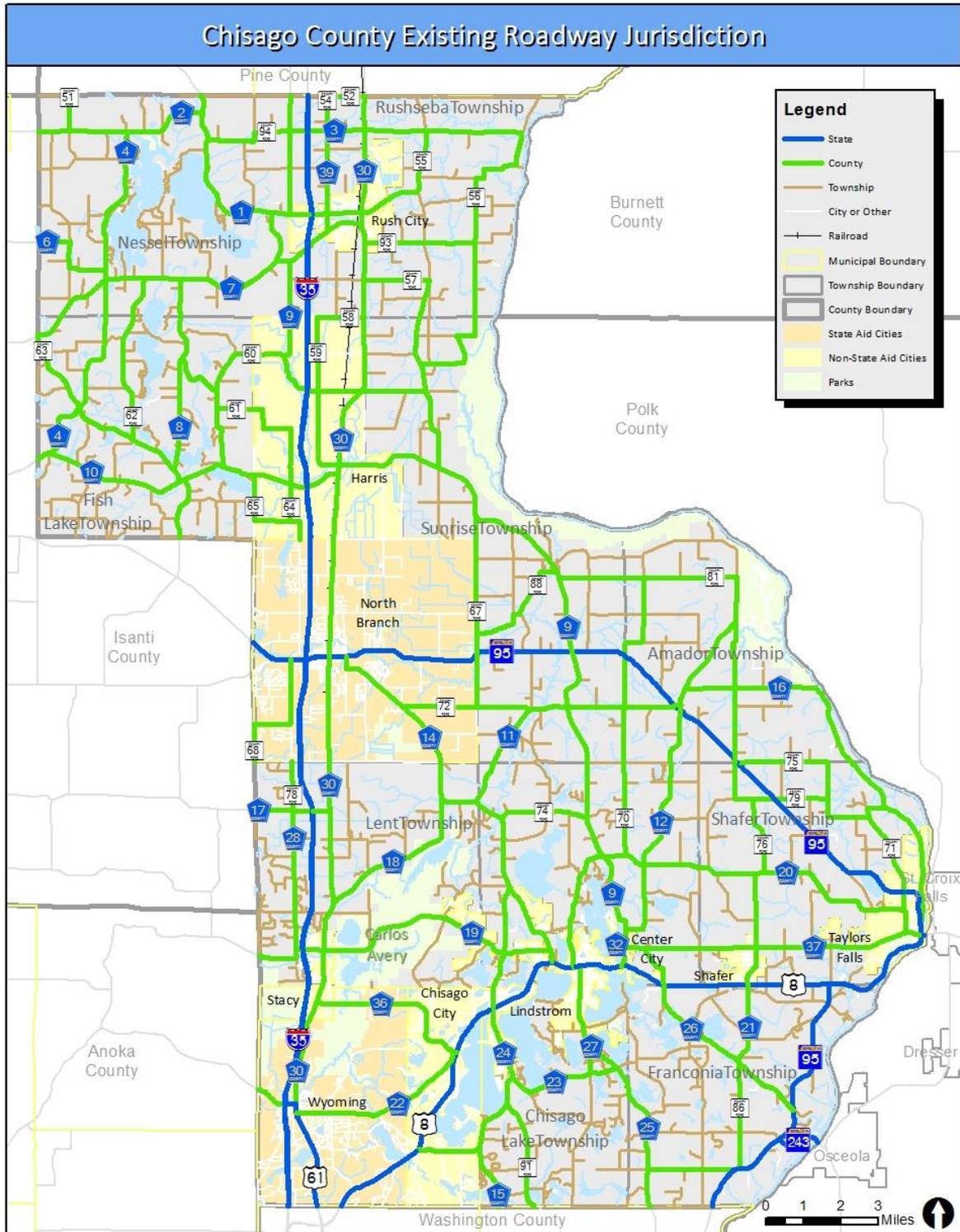
For all the reasons noted above, in 2012 – 2013, the county went through a year-long process to update the Countywide Comprehensive Transportation Plan. This Transportation Plan adopted by the County Board in July of 2013 (and as may be amended) shall be considered a part of this plan in its entirety. There are several maps from the current transportation plan included with this plan update.



Source: Chisago County Transportation Plan (2013)

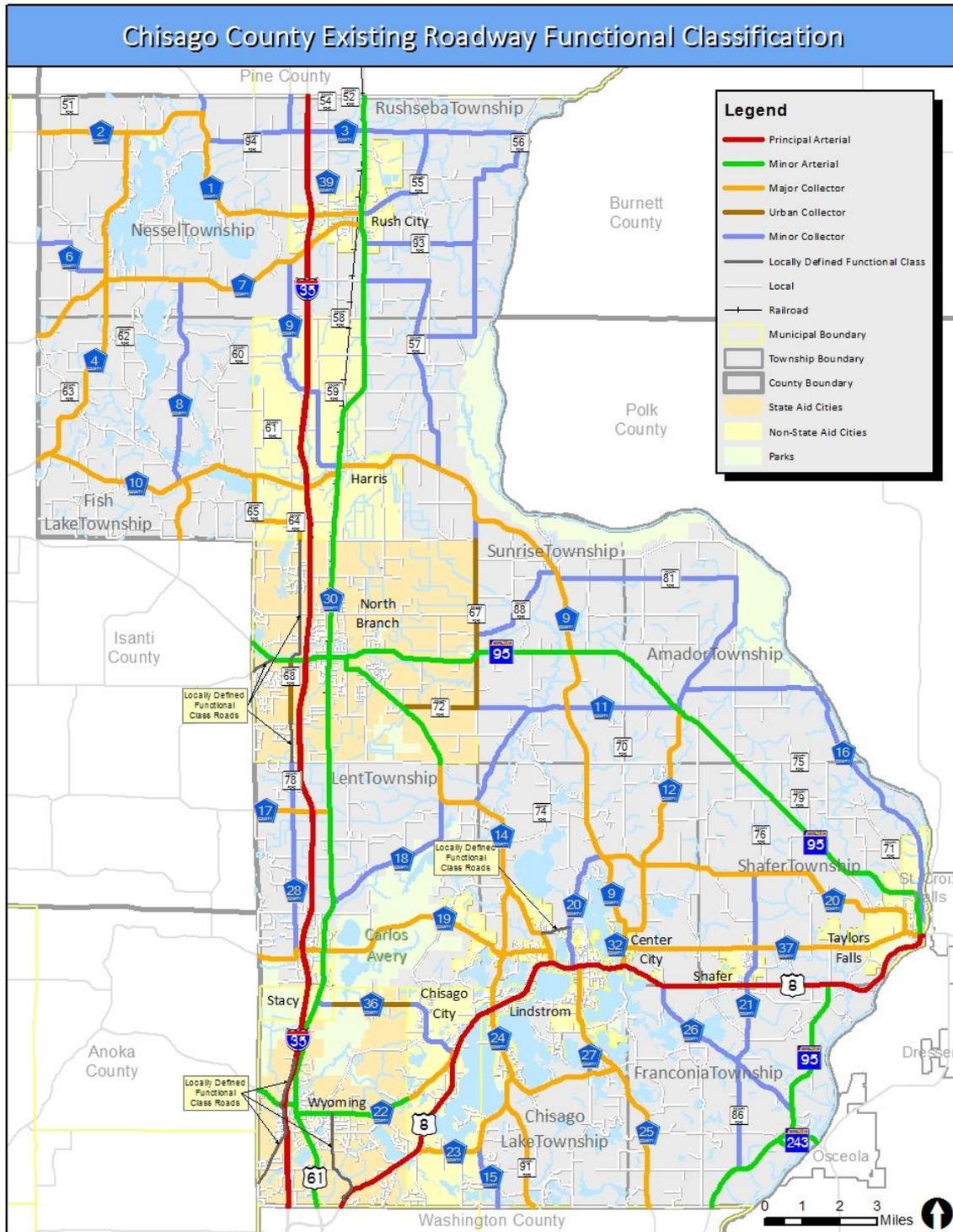
Figure 1-1

Date: May 2017



Source: Chisago County Transportation Plan (2013)

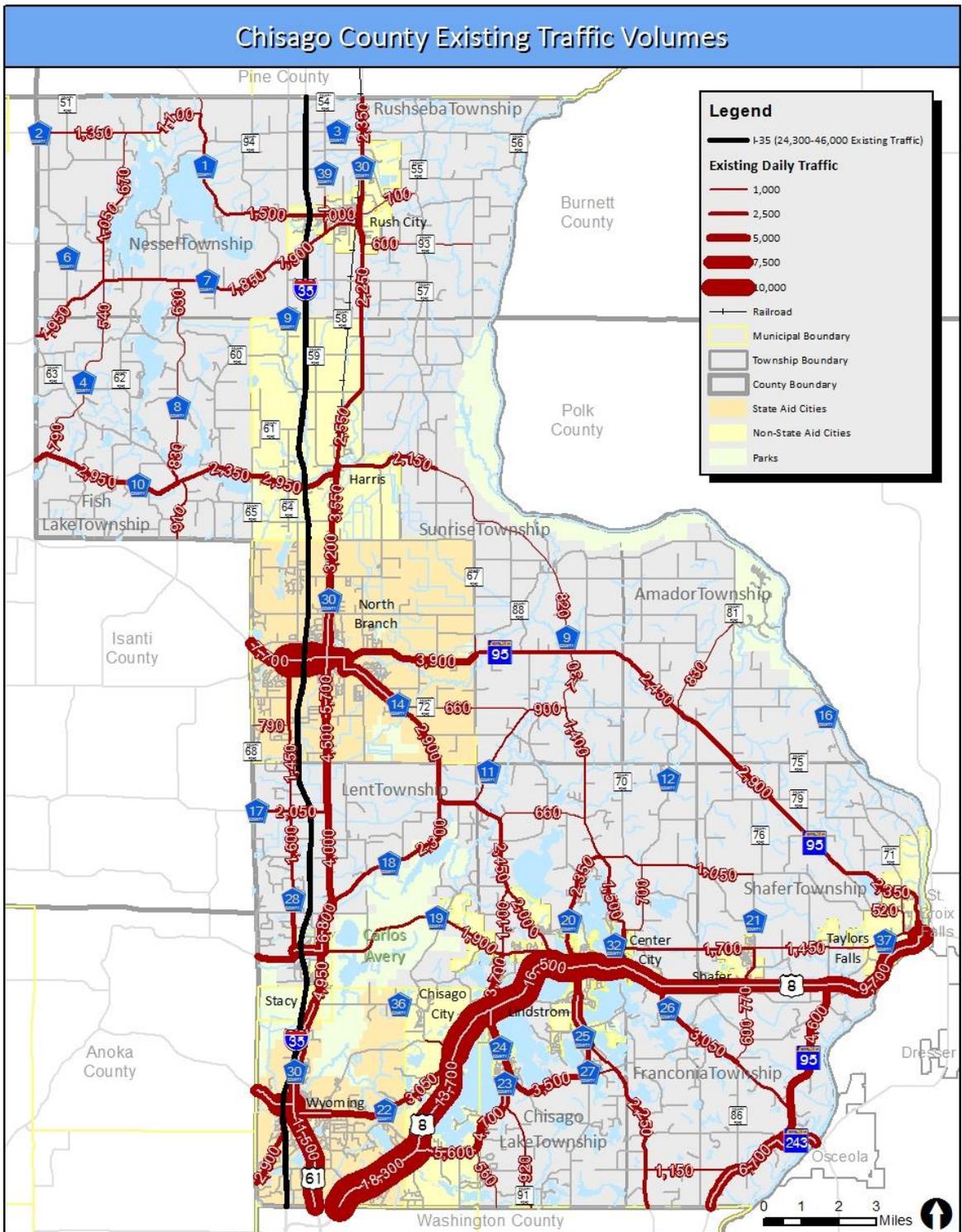
Figure 2-2
Date: May 2017



Source: Chisago County Transportation Plan (2013)

Figure 2-4

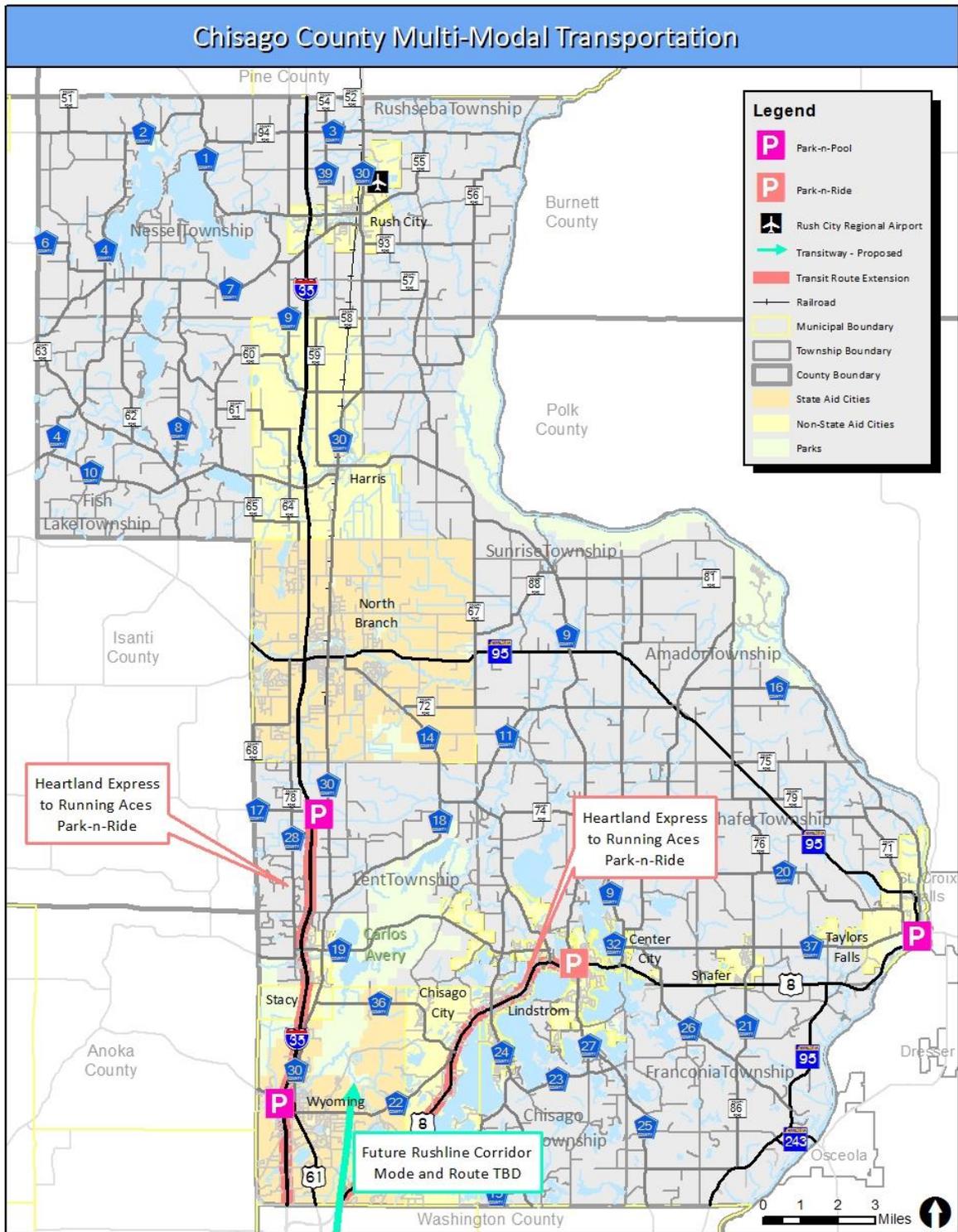
Date: May 2017



Source: Chisago County Transportation Plan (2013)

Figure 2-5

Date: May 2017



Source: Chisago County Transportation Plan (2013)

Figure 2-3
Date: May 2017

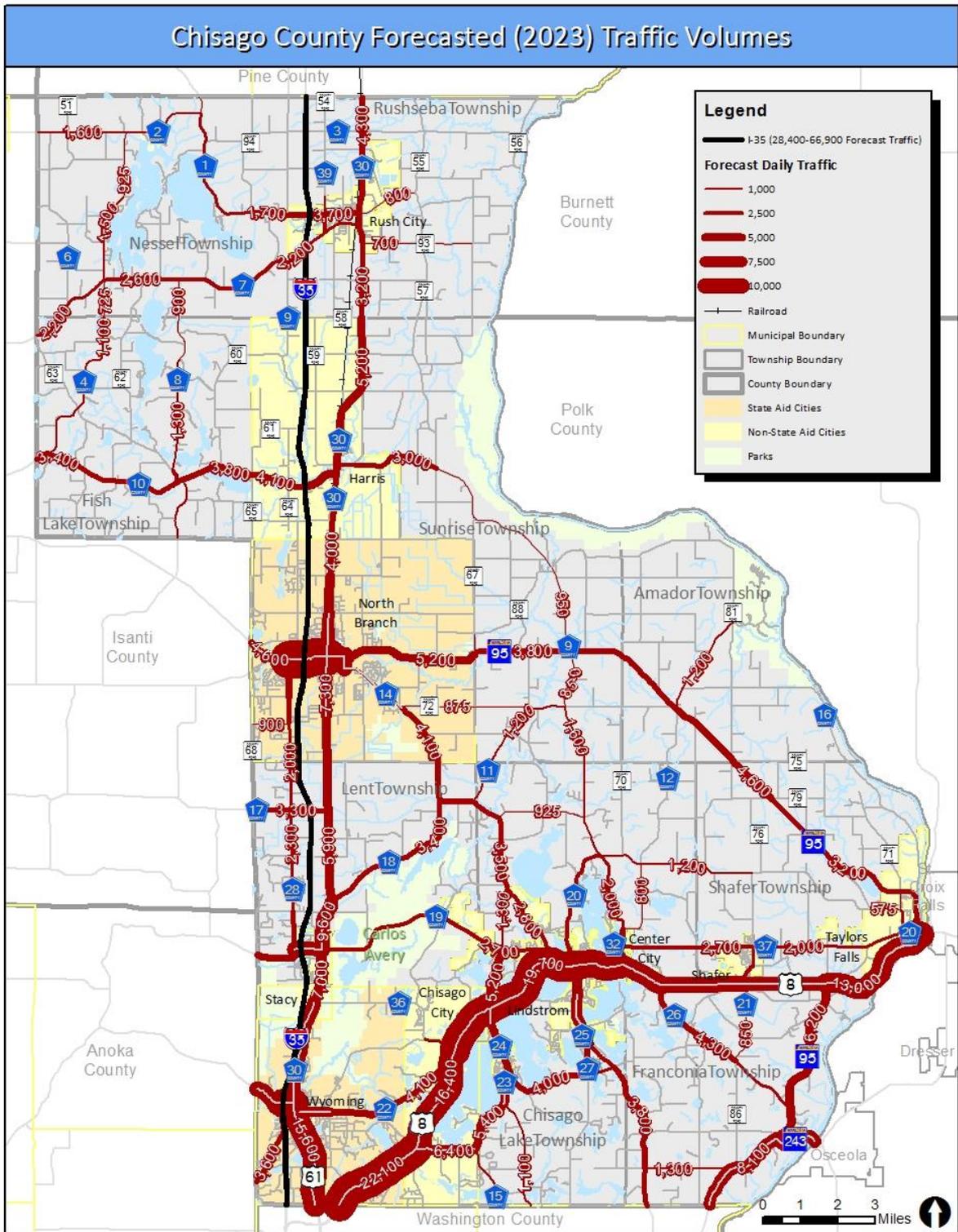


Figure 4-1

Source: Chisago County Transportation Plan (2013)

Date: May 2017

Public and Private Wastewater Systems

Due to the rapid growth of the County, wastewater treatment is an important issue for the County, cities and townships to keep under review. As part of the 1994 and 2006 County Comprehensive Plan processes, issues relating to water quality and waste management were raised. The county determined that it was important to identify and resolve issues relating to wastewater treatment, either municipal or individual. Therefore, in 1999, the county conducted a study called The Chisago County Wastewater Project - Developing Sustainable Wastewater Treatment Options for Growing Counties, to establish a planning process with statewide application to identify wastewater treatment alternatives to open water discharges. The project took place from July 1999 to June 2001. A thirty-member task force was established to address and develop a set of recommendations for the County on issues relating to wastewater treatment, either municipal or individual.

A complete inventory of all ten wastewater treatment facilities in the County was completed as part of this study. A detailed accounting was completed of all septage brought into and taken out of the County pumped within the County, and land applied within the County. The soils survey for the County was analyzed and a listing of which soils are appropriate for land application was developed. The number of individual sewage treatment systems in the County was identified and the volume of septage pumped per year was calculated, based on records turned in to the County by pumpers. An extensive windshield inventory also was conducted that identified general locations in the shoreland areas of the County with non-complaint residential septic systems.

Public Wastewater Treatment Facilities

There are currently eight public wastewater treatment facilities located in Chisago County. These are all Class D facilities except for the Chisago Lakes Joint Sewage Treatment Commission (CLJSTC) that is a Class C, and is explained below. The wastewater treatment facilities are shown below.

Chisago County Wastewater Treatment Facilities

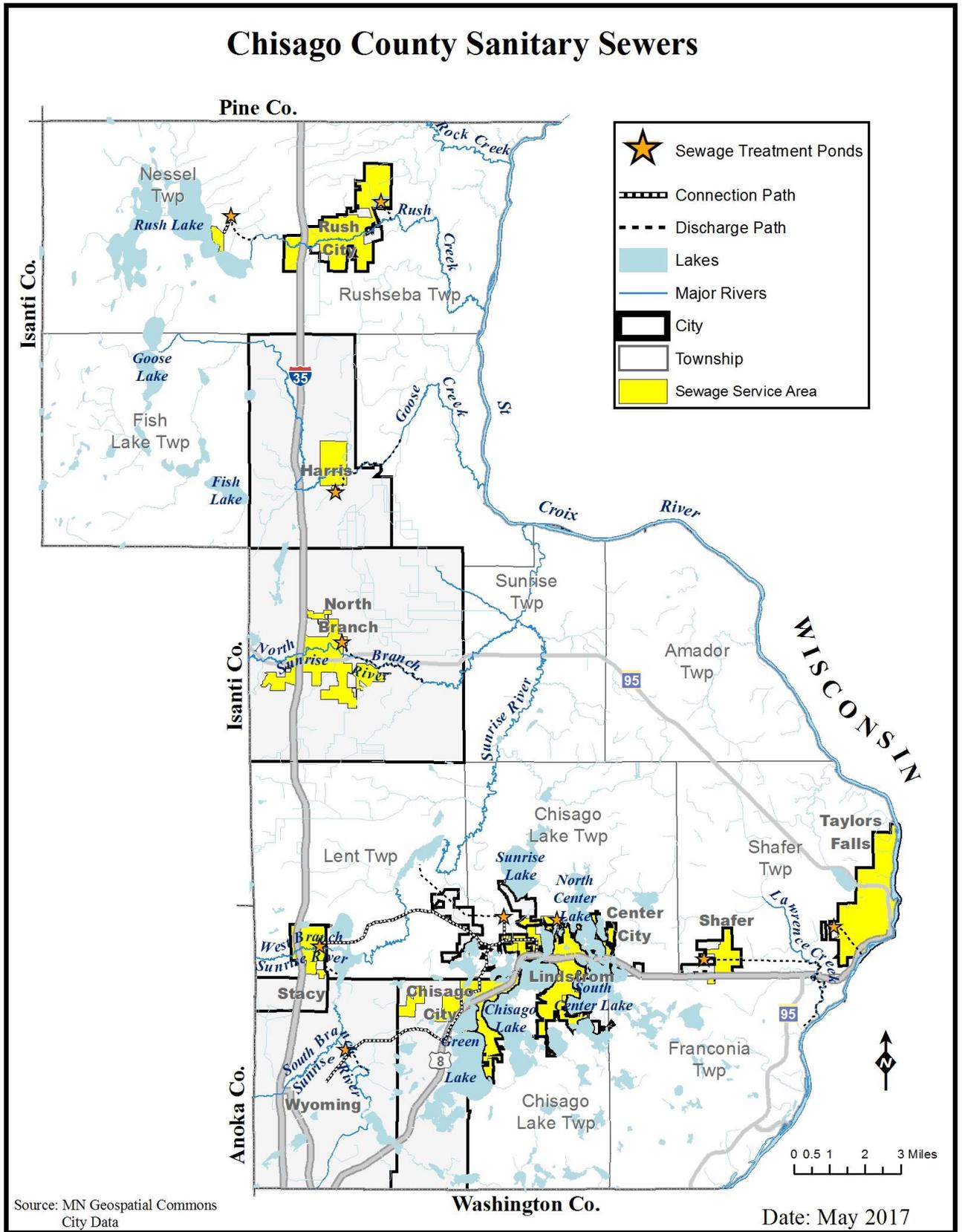
Facility	Permit #	Unit Process	Discharge Pt/Route	Discharge Type
Blue Waters Park	MN0050091	Stab Pond-Slow Sand Filt	Land	intermittent
Chisago Co - Shorewood	MN0051390	Stab Pond	CD8 to Rush Creek to St Croix	intermittent
Chisago Lakes JSTC	MN0055808	Sequencing Batch Reaction (SBR)	Creek to Sunrise R to St. Croix	continuous
Harris	MN0050130	Stab Ponds	Goose Creek to St Croix	intermittent
North Branch	MN0024350	Aerated Lagoons – Sand Filt	Sunrise R to St Croix	continuous

Rush City	MN0021342	Stab Ponds	Rush Creek to St Croix	intermittent
Shafer	MN0030848	Stab Ponds	Creek to Lawrence Cr to St Croix	intermittent
Taylor's Falls	MN0053309	Stab Ponds	St Croix	Intermittent
Almelund Rural Center		Community Septic System		Intermittent

Seven of the eight facilities are municipal systems, one is a sanitary sewer district on Rush Lake and one is a mobile home park/campground facility in North Chisago Lake Township. The Chisago Lakes Joint Sewage Treatment Commission was established in 1985 and is made up of the Cities of Chisago City, Lindstrom, Center City and Chisago County. The system operated by CLJSTC constructed an upgraded facility as a mechanical plant. The cities of Stacy and Wyoming have discontinued use of their individual plants and have connected to the new CLJSTC plant. North Branch upgraded its system in 2006 to accommodate future projected growth of the city. Harris upgraded its wastewater plant in 2007-2008. As noted in the table above, all systems have discharge routes that eventually lead to the St. Croix River with the exception of Blue Waters.

In 2013, the Almelund Rural Center (in Amador Township), received a grant of \$216,600 from the Minnesota Clean Water Fund from the Clean Water Legacy Act for the installation of a community sanitary sewer system. The Minnesota Pollution Control Agency (MPCA) administers this fund for the purpose of providing resources to on-the-ground actions that improve and protect Minnesota's water. The community sewer system was constructed in 2016 to serve 8 homes and 2 businesses and a new subordinate utility district manages the system. The system also received a public facility authority (PFA) loan and grant of \$60,000 from the Minnesota Department of Employment and Economic Development (DEED) and the total project cost was just over \$400,000.

Chisago County Sanitary Sewers



Subsurface Sewage Treatment Systems (SSTS)

As a part of the Wastewater Task Force, the number of septic systems was calculated from existing county records and information supplied by municipalities. The table below shows the number of systems in each jurisdiction as of November 2016.

Townships	# of STSS
Amador	342
Chisago Lakes	2,052
Fish Lake	893
Franconia	631
Lent	922
Nessel	985
Rushseba	387
Shafer	438
Sunrise	722
Total	7,372

Municipality	# of SSTS
Center City	5
Chisago City	677
Harris	437
Lindstrom	18
North Branch	1,667
Rush City	33
Shafer	4
Stacy	90
Taylor's Falls	89
Wyoming	1,313
	4,333

This information indicates that as of November 2016 there were about 11,700 septic systems (SSTS) in the county. Issues identified relating to SSTS included maintenance of existing SSTS, enforcement of rules and regulations relating to SSTS, educating homeowners on their responsibilities to maintain SSTS and land application of septage that is pumped from SSTS. One of the task force's major recommendations in the area of subsurface sewage treatment systems (SSTS) in 2001 was the adoption of a Preventative Maintenance Ordinance for all homeowners. The County, however, has not adopted such an ordinance.

In 2004, Chisago County received a \$240,000 grant from the Minnesota Pollution Control Agency to initiate a four-year septic pilot program. The purpose of the program is to find and fix septic systems that are determined to be an imminent threat to public health – those systems that are discharging on to the ground or surface waters or backing up into a dwelling or other establishment. In 2006, the City of North Branch entered into a joint owner's agreement with Chisago County to participate in the pilot program.

Chisago County has been a statewide leader in septic repair and replacement since 2005, when the County conducted a Pilot Program to find all systems that were an Imminent Threat to Public Health. During the Pilot Program, Chisago County Environmental Services staff walked 4,752 properties under the County's jurisdiction and found 429 septic systems that were an Imminent Threat to Public Health (9% of all systems). All of these systems have since been replaced.

Chisago County received a Certificate of Achievement from the Commissioner of the Minnesota Pollution Control Agency in 2012 for the accomplishments completed as part of the Pilot Program. In the years 2005 – 2011, Chisago County conducted 1,175 inspections to determine the compliance of individual septic systems. Of those

inspections, 65% of the systems were compliant, meeting State and County regulations, and 35% were noncompliant. Noncompliant systems are either an Imminent Threat to Public Health (surfacing to the ground or directly into surface water) or failing to protect groundwater by not meeting the required separation distance between the septage and groundwater.

With a noncompliance rate of 35% of all systems inspected, much work remains to be done to lessen the impact to water quality from failing septic systems. According to the County's updated SSTS ordinance, any septic system that fails a compliance inspection must be replaced. The most pressing need to facilitate replacement of noncompliant systems is to assist lower income property owners with funding.

During the Pilot Program, it was discovered that many residents need assistance in funding the replacement of their systems. Environmental Services staff developed, and the County Board approved, a county septic loan program. The County has approved more than 50 such loans since the inception of this program.

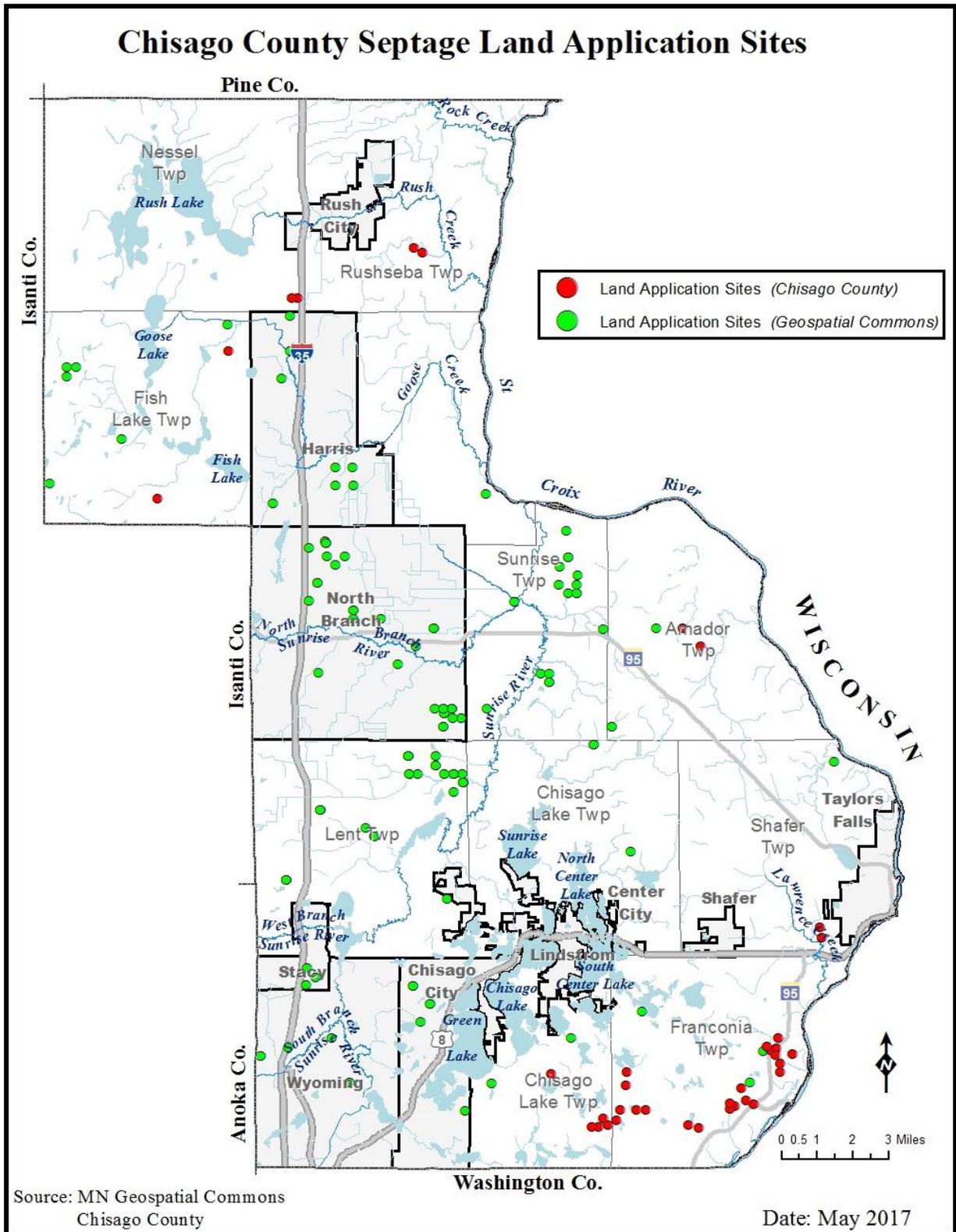
For the years 2010 – 2016, the County received additional Clean Water Legacy grant funding to assist low-income homeowners with septic replacement. An additional grant was awarded to Chisago County to conduct compliance inspections and assist with septic pumping fees in shoreland areas under the County's jurisdiction. To date, more than 200 property owners have taken advantage of this program. Chisago County will continue to seek Clean Water Legacy funding for this purpose.

Land Application of Septage

As a part of the 1999 – 2001 task force's studies, the issue of land application of septage was looked at by reviewing data relating to the amount of septage pumped in Chisago County and projections for future needs as well as identification of land application sites. Land applications are currently determined by the pumper through relationships with landowners. At the time of the study, it was identified that as Chisago County continues to grow, finding sites for septage disposal was becoming increasingly difficult. County staff, however, is not aware of any current difficulties in finding sites for the land application of septage. As a part of the Land Application Ordinance recommendation, the Task Force also recommended that the County charge a fee per new individual sewage treatment systems to be used to develop an innovative set aside program for land application of septage, possibly through the Purchase of Development Rights or Transfer of Development Credits concept. The county has not yet started charging such a fee.

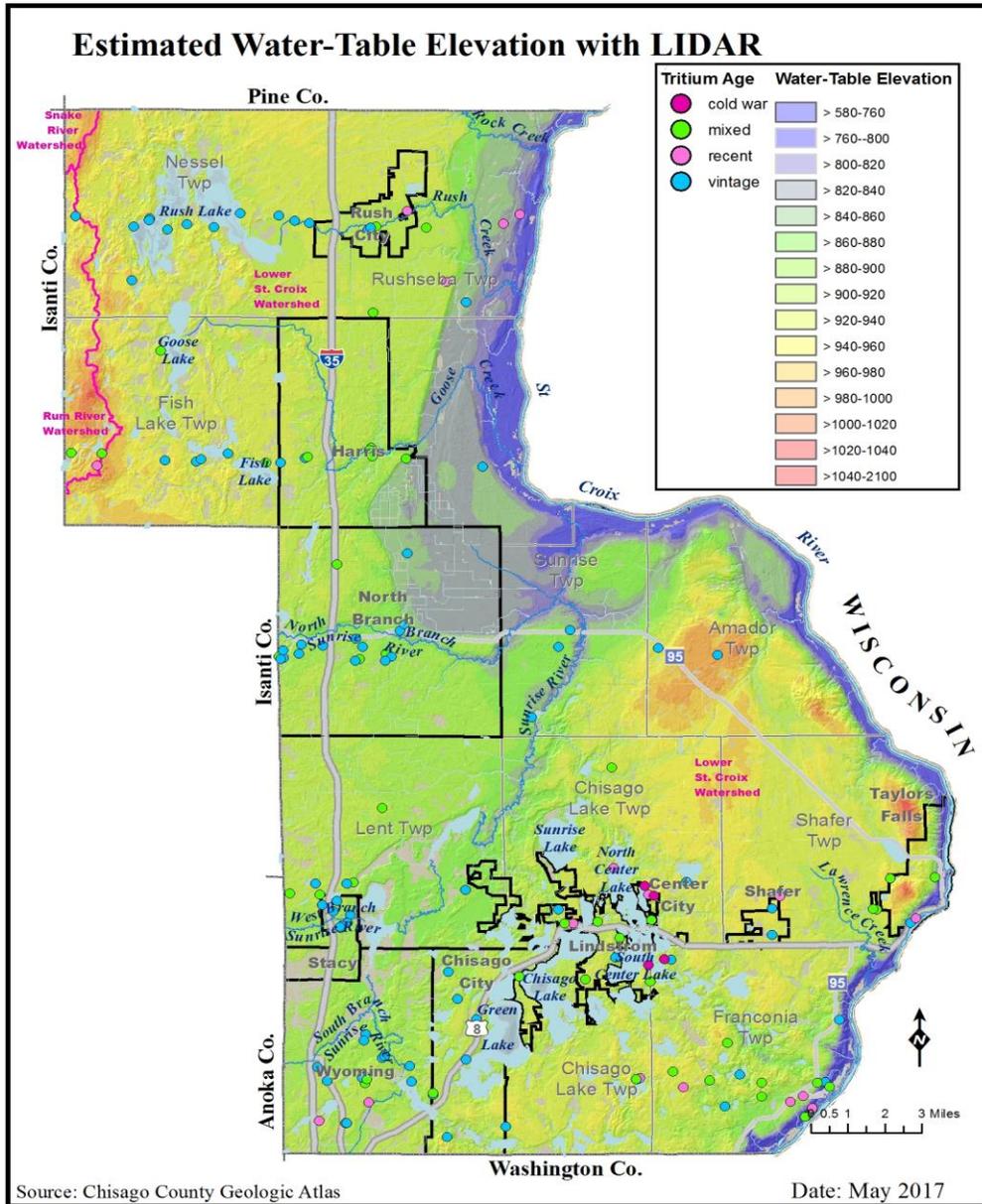
A second Task Force recommendation was for the County Board to adopt a Land Application Ordinance that follows federal Environmental Protection Agency (EPA) and Minnesota Pollution Control Agency (MPCA) guidelines as well as developing a set of regulations specific to Chisago County. The County adopted a Land Application Ordinance in 2010.

Chisago County Septage Land Application Sites



Public Water Systems and Private Wells

Due to the abundance of aquifers in Chisago County, there is an adequate quantity of potable water available and the aquifers are discussed in more detail in the Natural Resources Element. In addition, there is a wide array of information about groundwater in the County's Local Water Plan and Part B of the Geologic Atlas (Hydrogeology) (dated 2014) of Chisago County. Maps are available showing the estimated water table elevations and groundwater flow in the Geologic Atlas. The map below shows the major watersheds and the estimated water table elevations throughout the county.



Water Use Appropriation Permits

The Minnesota Department of Natural Resources (DNR) issues groundwater appropriation permits. A Water Use (appropriation) permit from Minnesota Department of Natural Resources (DNR) is required for all users withdrawing more than 10,000 gallons of water per day or 1 million gallons per year, surface or groundwater. All active water appropriation permit holders are required to measure monthly water use with an approved measuring device to an accuracy of 10 percent and report water use yearly.

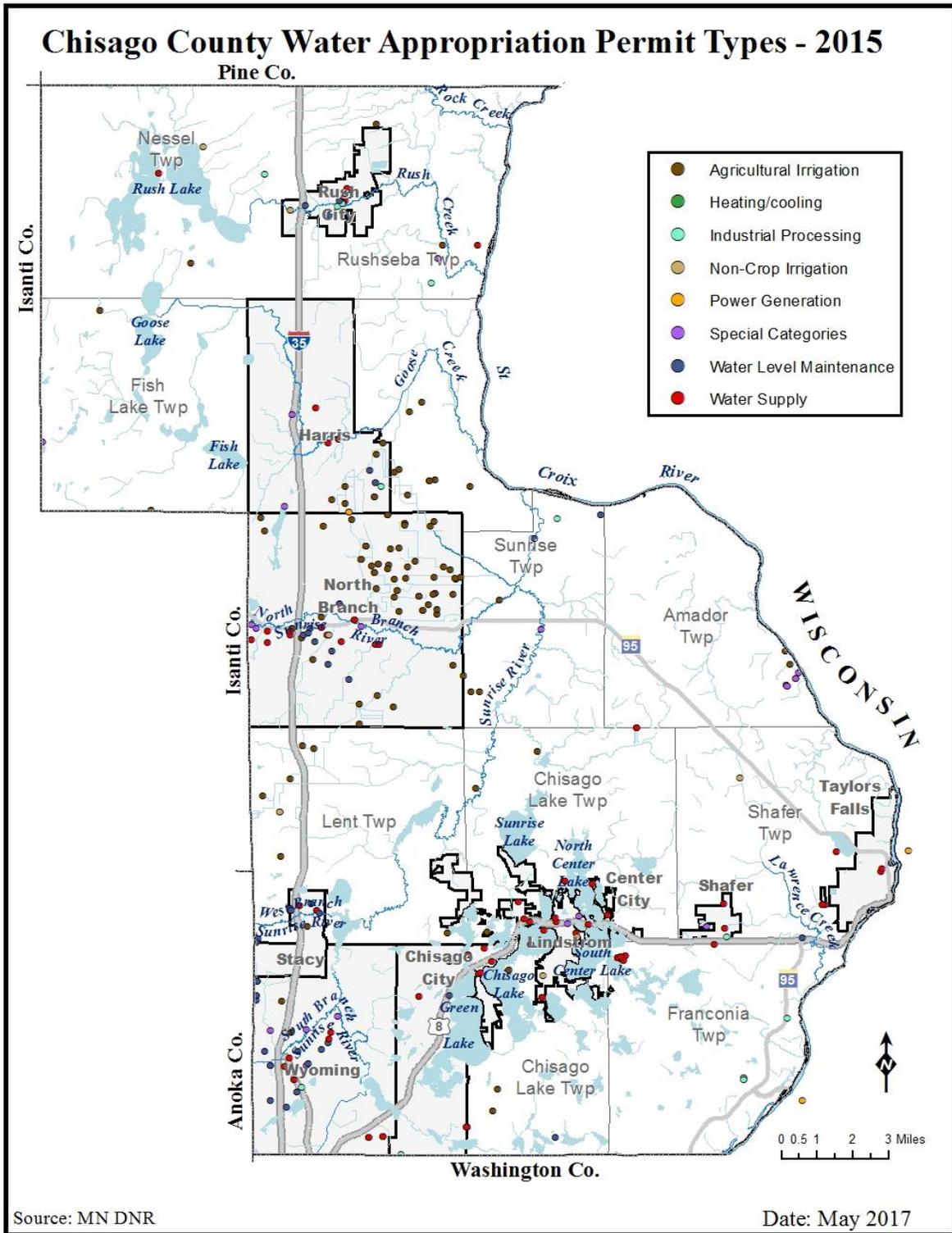
There are several exemptions to water appropriation permit requirements:

- domestic uses serving less than 25 persons for general residential purposes,
- test pumping of a groundwater source,
- reuse of water already authorized by a permit (e.g. water purchased from a municipal water system, or
- certain agricultural drainage systems.

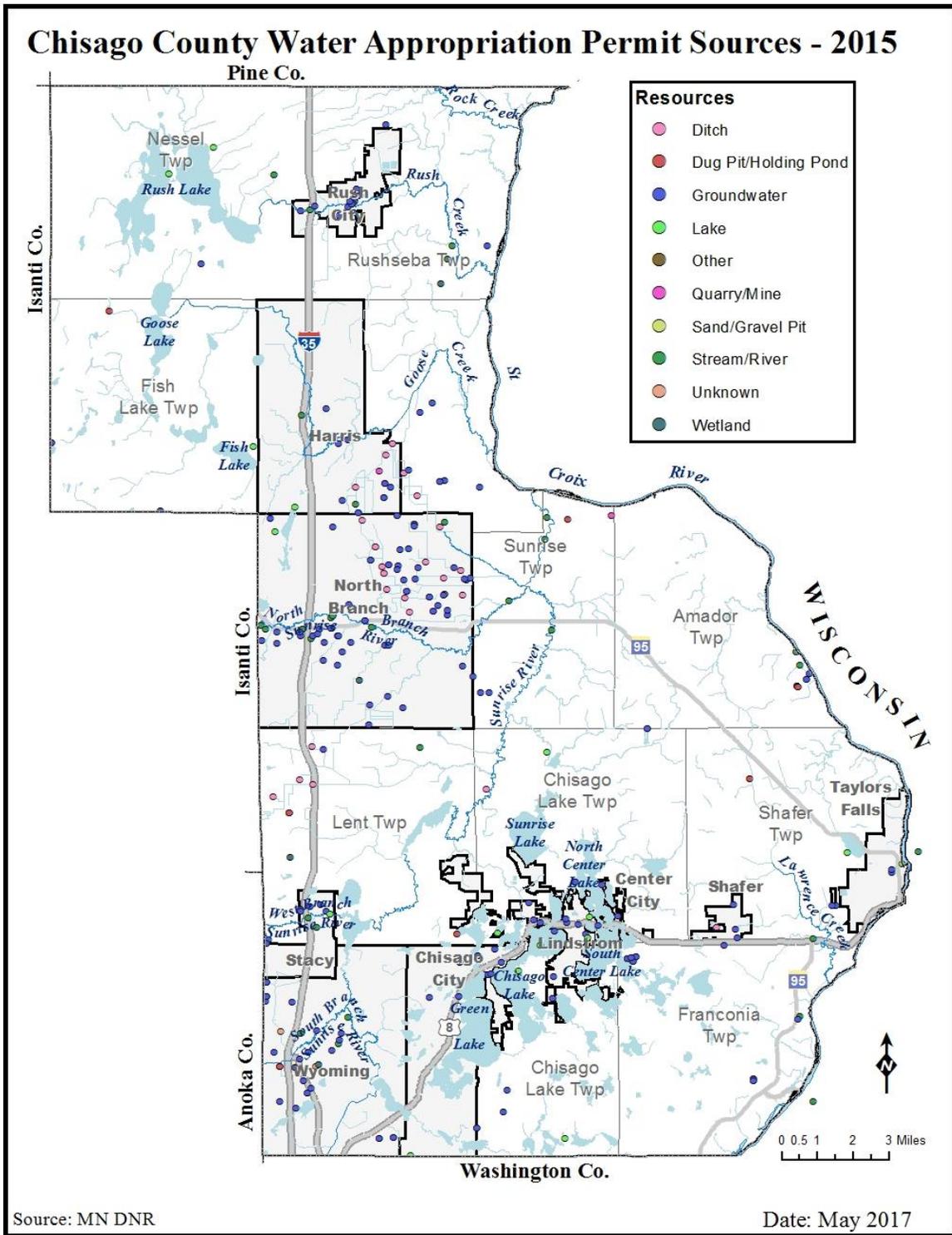
In 2015, the primary permitted use for water in Chisago County was for municipal water supplies. Agricultural production and sod farming follow this. Smaller amounts of water are appropriated for sand and gravel washing, golf course irrigation, commercial and industrial, snow and ice making, private water works and sand and gravel pit dewatering.

The maps on pages 7-18 and 7-19 show the general locations of the DNR appropriation permits issued up to December 2015 by groundwater use and by water source.

For more information about water and water use, please refer to the County's Comprehensive Local Water Plan, Part B of the Geologic Atlas (Hydrogeology) of Chisago County and the Natural Resources Element of this Comprehensive Plan.



Major crop irrigation and waterworks are the largest number of permits issued followed by non-crop irrigation.



By far the largest resource being used for the water appropriations is groundwater followed by ditches at a much lower percentage.

Nine communities in Chisago County have their own water supply systems. Seven of these nine communities have some type of water treatment. Wellhead protection plans are required for all cities and community water supply systems in the county. Wellhead protection is a method of preventing contamination of a public water supply well by effectively managing potential contaminant sources in the area that contributes water to a public water supply well. The primary goal of Wellhead Protection is to protect public health. An important benefit of Wellhead Protection is the emphasis on the prevention of drinking water contamination versus the remediation of a contaminated drinking water supply well. The cost of prevention is much less than the cost of remediation.

The Federal Safe Drinking Water Act for public water suppliers mandates Wellhead Protection. The Minnesota Department of Health has overall statutory authority over Wellhead Protection as granted through the Minnesota Groundwater Protection Act. Wellhead Protection is science based and identifies the water source along with vulnerability to contamination threats. The resultant plan identifies specific activities designed to protect the aquifer/water source. These activities can include groundwater education, land use planning, best management practices and abandoned well sealing. Plan implementation is required and not optional. The Minnesota Department of Health will audit community Wellhead Protection efforts. Financial support is available from the Minnesota Department of Health to communities to support Wellhead Protection activities.

All public water suppliers in Chisago County are required to implement Wellhead Protection measures. Many communities in Chisago County and the greater Sunrise River watershed are at various points in the process to develop Wellhead Protection Plans. Rush City, Harris, Lindstrom, Taylors Falls, Forest Lake and Hazelden Foundation have completed Wellhead Protection Plans. As of 2013, Center City, North Branch, Stacy, Wyoming, Chisago City and Shafer were in the process of completing Wellhead Protection Plans.

A County Well Index (CWI) is available for the county. This index is a database of information collected from all well logs that well drillers submit to the Minnesota Department of Health. Minnesota Department of Health administers the Well Code program for wells in Chisago County. In general, groundwater quantity has not been issue for private wells in the county.

Stormwater Management

Stormwater management has become a greater and greater concern for areas of development and high growth in Chisago County. With new development comes stormwater runoff control structures and drainage that need to be managed.

The 2013 Chisago County Local Water Management Plan noted the implementation of stormwater management standards and erosion control projects in developing areas as a priority concern. The Plan goes on to note that stormwater retrofit assessment had been completed for Center City, Chisago City and Lindstrom and as a result, several

improvement projects that included stormwater best management practices were completed in those cities.

(Please see the [County Local Water Management Plan](#) for more information about the priorities and actions about stormwater management and erosion control in Chisago County)

Public Ditches

The ditch system in Chisago County plays an important role in managing the drainage of surface water in many parts of the County. These ditches have been constructed and have evolved in importance and function over the many years they have been in existence.

Most of the county ditches in Chisago County were authorized and constructed in the early 1900's during the federal government's sod-busting incentive period. This was an effort to expand the number of tillable acres in the United States by draining wetlands. There also were many laterals established in the 1940's to many of these ditches. Based on best data available in 2014, there are eleven (11) county ditches and four (4) judicial ditches (those that traverse more than one county boundary) established in Chisago County. Judicial Ditch 1 has been abandoned and is now a tributary to Comfort Lake from Forest Lake. Judicial Ditch 2 has been abandoned and is now portions of the Sunrise River. Judicial Ditches 3 & 4 also are abandoned.

Most of the active county ditches are in the northwestern part of the county where there tends to be more agricultural production. There also are four judicial ditches in the county that are in use. The map on page 7-25 shows the location of the ditches in Chisago County.

Ditches may have a negative effect on the water quality of the receiving waters due to erosion, movement of nutrients, pesticides and sediments and lack of adequate vegetated buffer strips along the banks. Management and maintenance of the Chisago County public ditch system has not taken place on a regular basis, but rather has been complaint driven.

The Minnesota Board of Water and Soil Resources Soil Erosion and Drainage Law Compliance Program awarded Chisago County a grant in 2014. This grant was to help Chisago County implement two objectives identified in the September 2013-2023 Chisago County Local Water Management Plan:

- (1) Develop an inventory of the County public ditch system, and significant tributaries, including record searching and field verification to confirm locations of existing public ditches. Identify, inventory, and evaluate functions, purpose, and necessity of the Chisago County ditch system. Determine legal status of ditches, rights, and responsibilities as defined in Minnesota Statutes 103E.

- (2) Develop a plan for management and maintenance of the Chisago County ditch system. Establish a system and protocol for establishing best management practices within the easement right of ways of existing public ditches.

As part of the inventory and study of the County ditches, county staff formed a technical working group (the County Ditch Workgroup) with representatives from County Environmental Services, County Highway, County Surveyor, the County Attorney's Office and the Chisago County Soil and Water Conservation District. This group reviewed the best data available about the ditches and conducted fieldwork and inspections of all the ditches in the County.

In 2015 – 2016, the County Ditch Workgroup conducted the study and completed a report about the ditches in Chisago County as required by the approved grant. A significant finding of the study was that of the 56 miles of ditches in the County, about one-half of their length is not located in their legally described locations. In other words, there are discrepancies for some of the ditches between the legally established location for the ditch and the actual location of the nearest ditch.

The following is a summary of the findings in the 2016 report about ditches in Chisago County.

Summary of Ditch Findings

There are about 56 miles of public drainage ditches in Chisago County. Of these, there are many miles of the ditches that are not in the locations as described in the legal documents that were originally adopted for the creation of the ditches.

Because there are ditches not in the locations described in their recorded documents, the County will need to decide if in fact those ditches are public. If so, then the County should prepare new legal descriptions for them and then have those new descriptions approved by the affected landowners and the County. This process may include a "redetermination of benefits". This is a proceeding that establishes whose land benefits or is impacted from the ditch, how the maintenance costs and how the County should apportion compensation among landowners. If they are not public ditches, then it is the responsibility of the adjacent property owner(s) to maintain them and to create the required buffer strips along each side of the ditch.

A new Minnesota Buffer Law (going into effect in 2017) will affect much of the frontage along the ditches. There are areas along the public ditches that will be required to have a 16.5-foot-wide vegetative (uncultivated) buffer strip and there are many stretches of the public waters ditches that will be required to have a 50-foot-wide vegetative (uncultivated) buffer. Determining which

ditches and which sections of each ditch meet or do not meet the buffer requirements will require additional fieldwork.

In November 2016, the County Board accepted the public ditch system report as prepared by County staff. The County Board also created a ditch committee to consider the requirements of the new Minnesota Buffer Law, make recommendations about buffer law enforcement, and generate a process to resolve ditch discrepancies and other ditch related tasks.

On December 7, 2016, the County Board adopted a motion to form the Chisago County Public Ditch Committee (with representation from several county departments and state agencies). This Committee is to conduct a study and recommendation process about possible County actions in the implementation of the State Buffer Law and actions to assist landowners in resolving ditch discrepancies. The Ditch Committee may, from time to time, offer policy recommendations and ditch related actions to the County Board.

Private Drain Tile Systems

Drain tile systems are usually located within agricultural fields where water is collected using perforated drains installed below the ground surface. Property owners may connect these private drainage systems to, (but they are not a part of), the public infrastructure. Farmers use these drain systems to remove excess water (especially from saturated soils) to allow for timely fieldwork with farm machinery and to reduce stress on growing crops (which increases agricultural productivity).

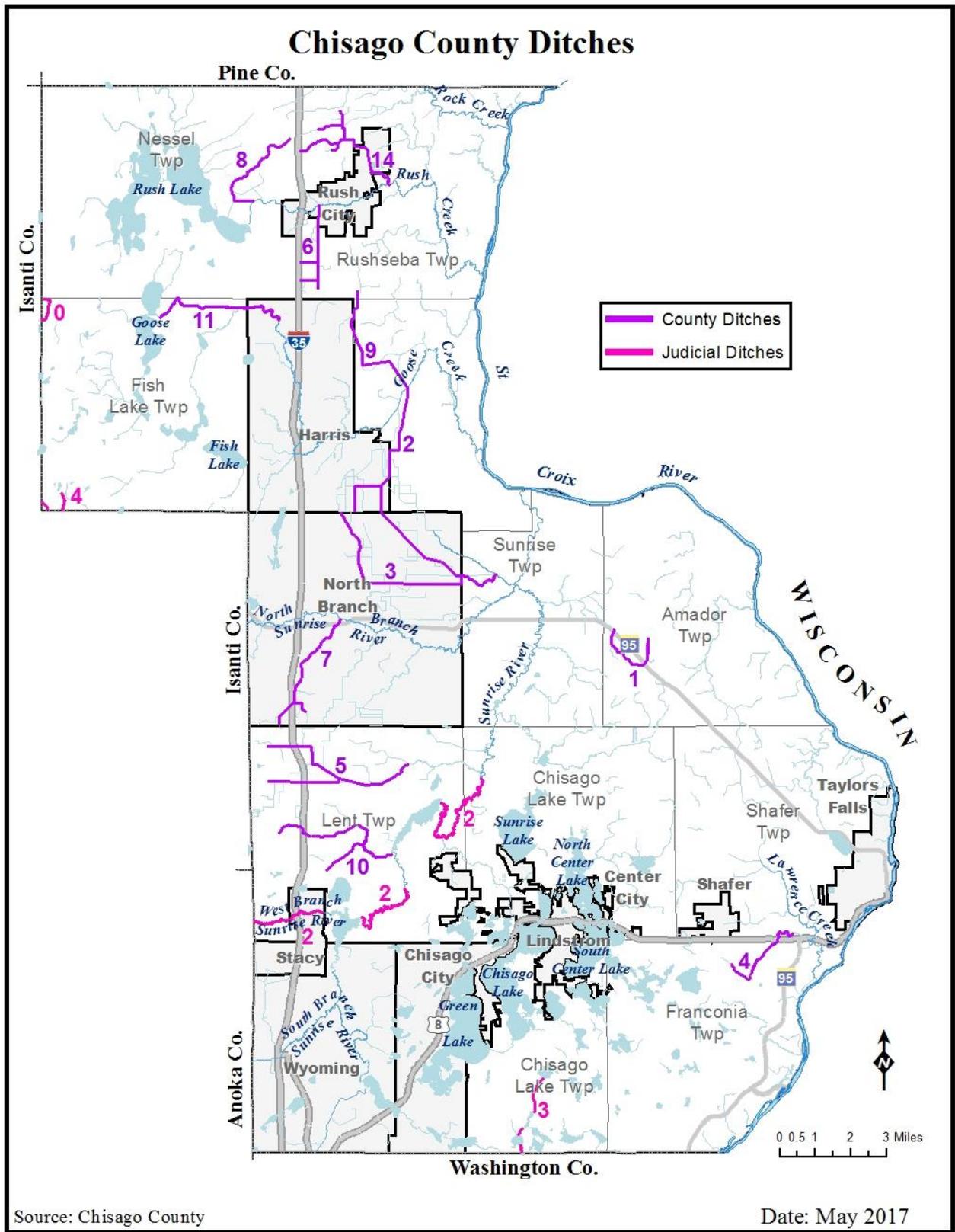
Subsurface tile drains consist of a conduit installed beneath the ground surface to collect and/or convey drainage water. Tiles may be constructed of corrugated plastic tubing, clay or concrete. The choice of tile material depends on the soil type, cost, resiliency, strength and conveyance. Sandier soils will need little, if any, additional drainage, whereas soils with high clay contents will hold their water tighter, requiring tile lines to be placed closer together.

Private landowners install and maintain these systems. As such, the location of these private systems are only known by the landowners that installed them unless there is a recorded instrument with documentation about the system. Field surveys may not identify or easily locate in-ground drainage systems. Chisago County does not have or keep records about these systems, but acknowledges them in this Plan as a potentially significant agricultural land use feature.

Tiles can alter the waterways and hydrology of areas where they are located, as well as the hydrology, water quality and ground water of adjacent properties. The owners/operators of drain tile systems should take care so that tiles do not negatively affect valuable wildlife habitat (especially for wetland and stream dependent species) or cause detrimental water impacts to adjacent property owners. Where possible, property owners should identify and locate private drain tile systems when conveying their

property or when proposing land use/zoning/development activities. All drainage systems must meet the requirements of the State Wetland Conservation Act if the system impacts or alters wetlands.

Subsurface tile drainage systems can convey pesticides and soluble nitrate-nitrogen (N) from the crop root zone. Implementation of Best Management Practices (BMP's) when using nitrogen fertilizer can reduce the potential loss of Nitrate-N and will help protect water quality and surrounding land uses and waterways. Property owners installing new or improved field drainage systems should consider using crop management practices, landscape structures and other BMP's to protect area waterways and nearby land uses. The County encourages landowners to use BMP's when developing drain tile systems to protect and preserve soils, soil content and nutrients, reduce runoff and erosion and to lessen the effects of drainage on downstream systems.

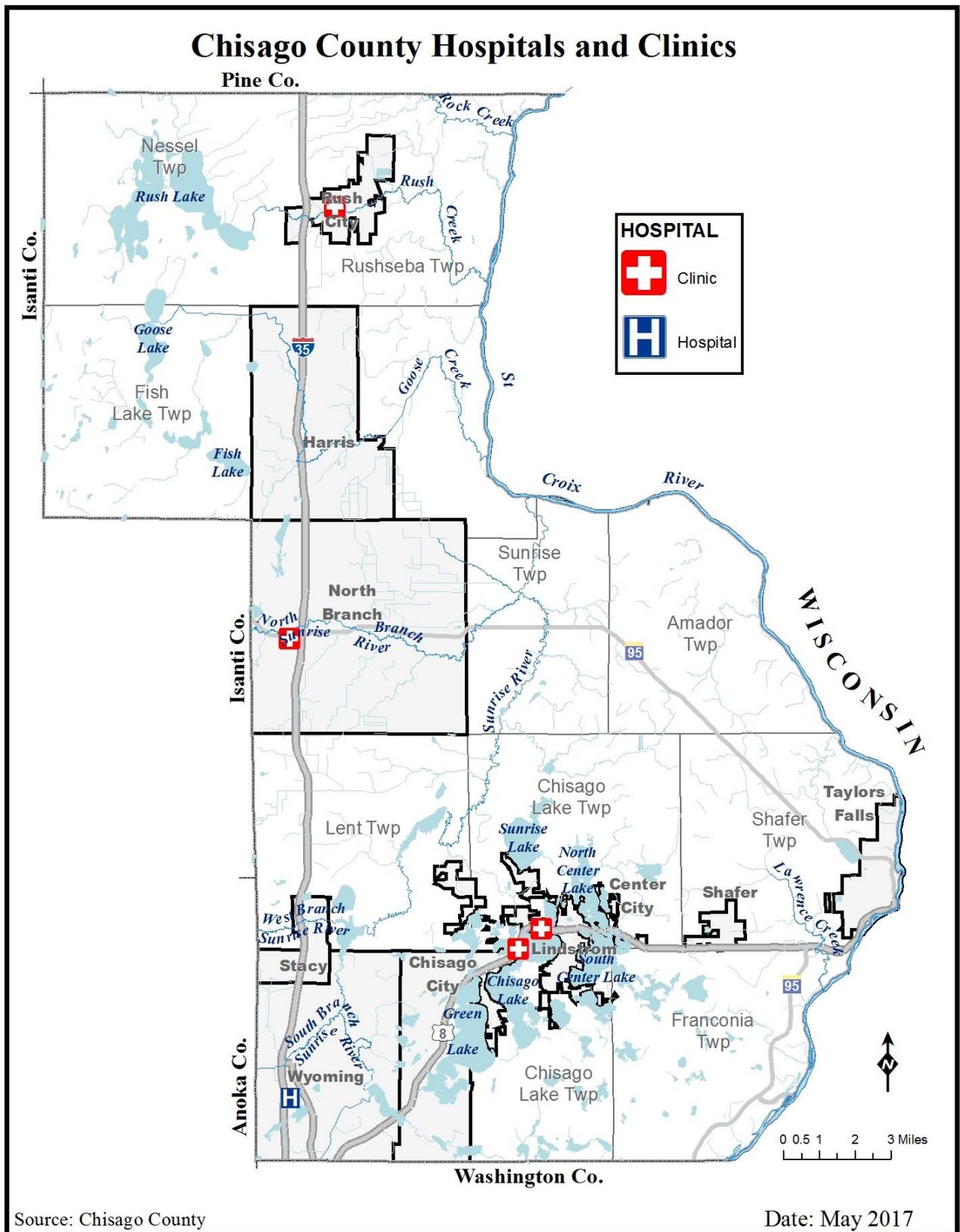


Health Care Services

Health care service is provided to the county by a variety of agencies and health service facilities. There are five clinics located in the county and one hospital. Clinics are located in Chisago City, Lindstrom, North Branch, Rush City and a clinic/hospital is located in the City of Wyoming. The map on the next page (7-27) shows the location of the clinics and hospital in Chisago County. The County Public Health nurses provide other health care at the Health and Human Services building in North Branch. The County opened this building in 2007.

Facilities located in areas adjacent to the county provide additional health services. Health care facilities provided to the county can be regarded as adequate for present needs. Other health care facilities in adjacent counties are readily accessible to Chisago County residents. These other facilities are located in Braham, Cambridge, Pine City, Forest Lake, Osceola, Wisconsin, St. Croix Falls, Wisconsin and the Metropolitan Area. Any inadequacies in health care facilities within the county are covered to some extent by the adjacent health care units. Health care facilities in Chisago County compare favorably with those for the entire state.

Chisago County Hospitals and Clinics

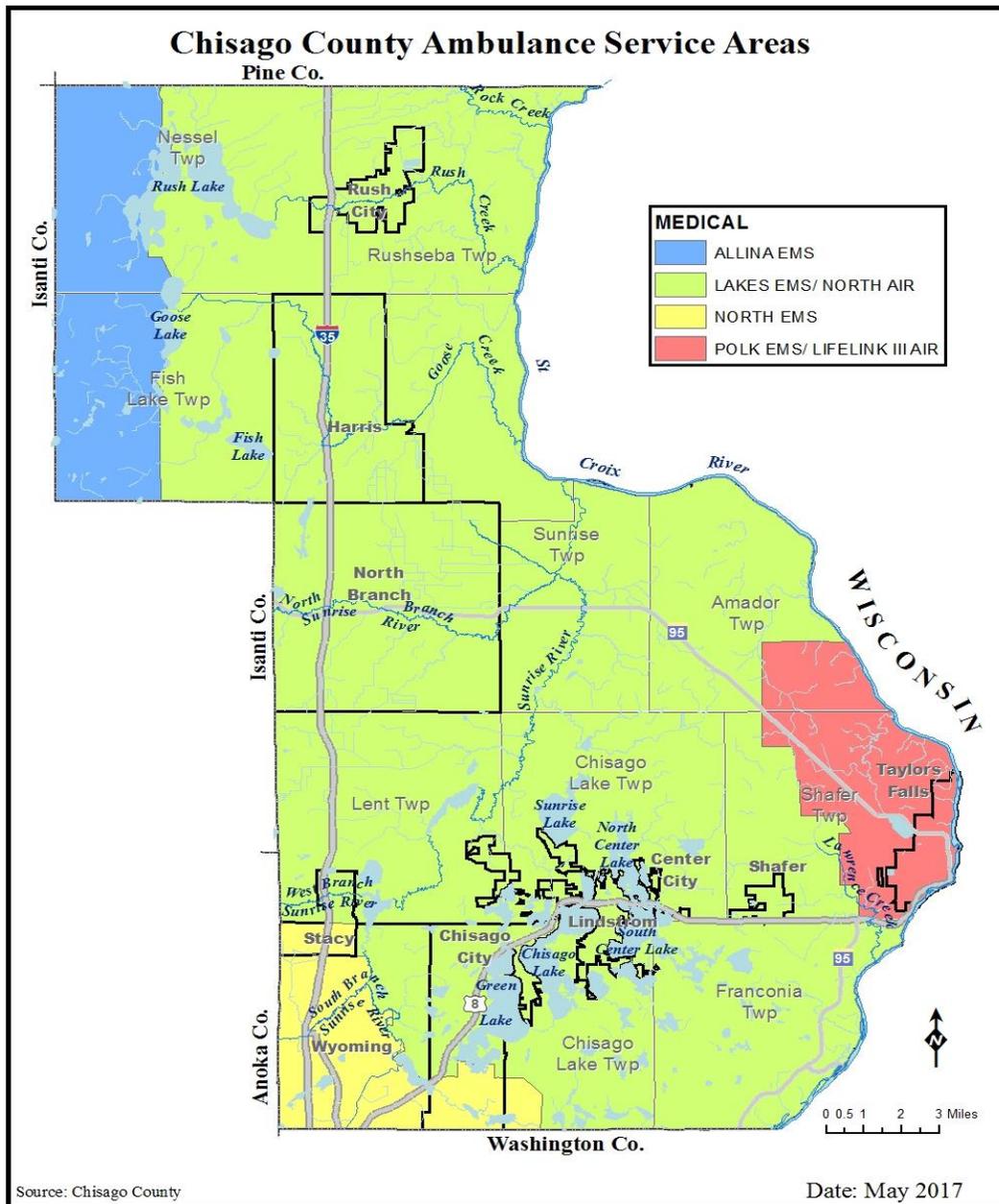


Source: Chisago County

Date: May 2017

Ambulance service is available within 20 miles of any location in the county. The Lakes Region EMS covers the majority of the county. Allina Medical provides service for the far northwestern portion of the county, the Taylors Falls Region being serviced by St. Croix Valley EMS and the North Memorial Medical Transportation servicing the far southwestern corner of the county. The map below shows these service areas.

There are three nursing homes located within the county: one in Chisago City, one in Rush City and the other in North Branch.



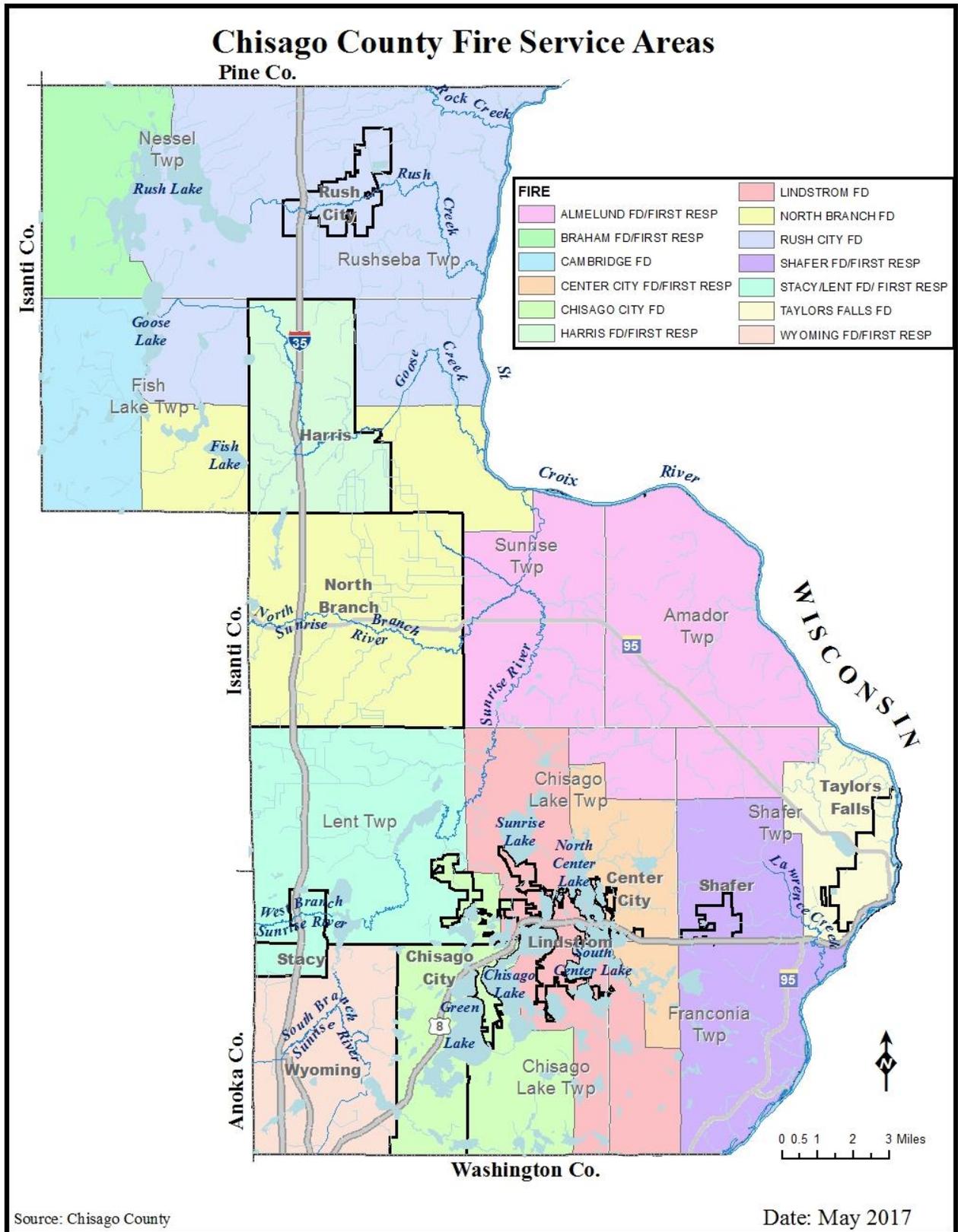
Law Enforcement

The Chisago County Sheriff's Office is responsible for providing law enforcement services the unincorporated areas of the county. In addition, several municipalities within the County contract with the Sheriff's Office for law enforcement services in lieu of having their own police department. These include Rush City, Harris, Stacy, Shafer, Center City and Taylors Falls. The Cities Wyoming and North Branch each have its own police department. The Cities of Lindstrom and Chisago City combined their law enforcement agencies to form one department to service both cities known as the Lakes Area Police Department.

Chisago County has outgrown its jail capacity. In March 2016, the County Board authorized the construction of Phase II of the County Public Safety Center (including a new jail) adjacent to the County Communications center on Per Road in Center City. It is expected that this project (including the new jail) will be completed by the spring of 2018.

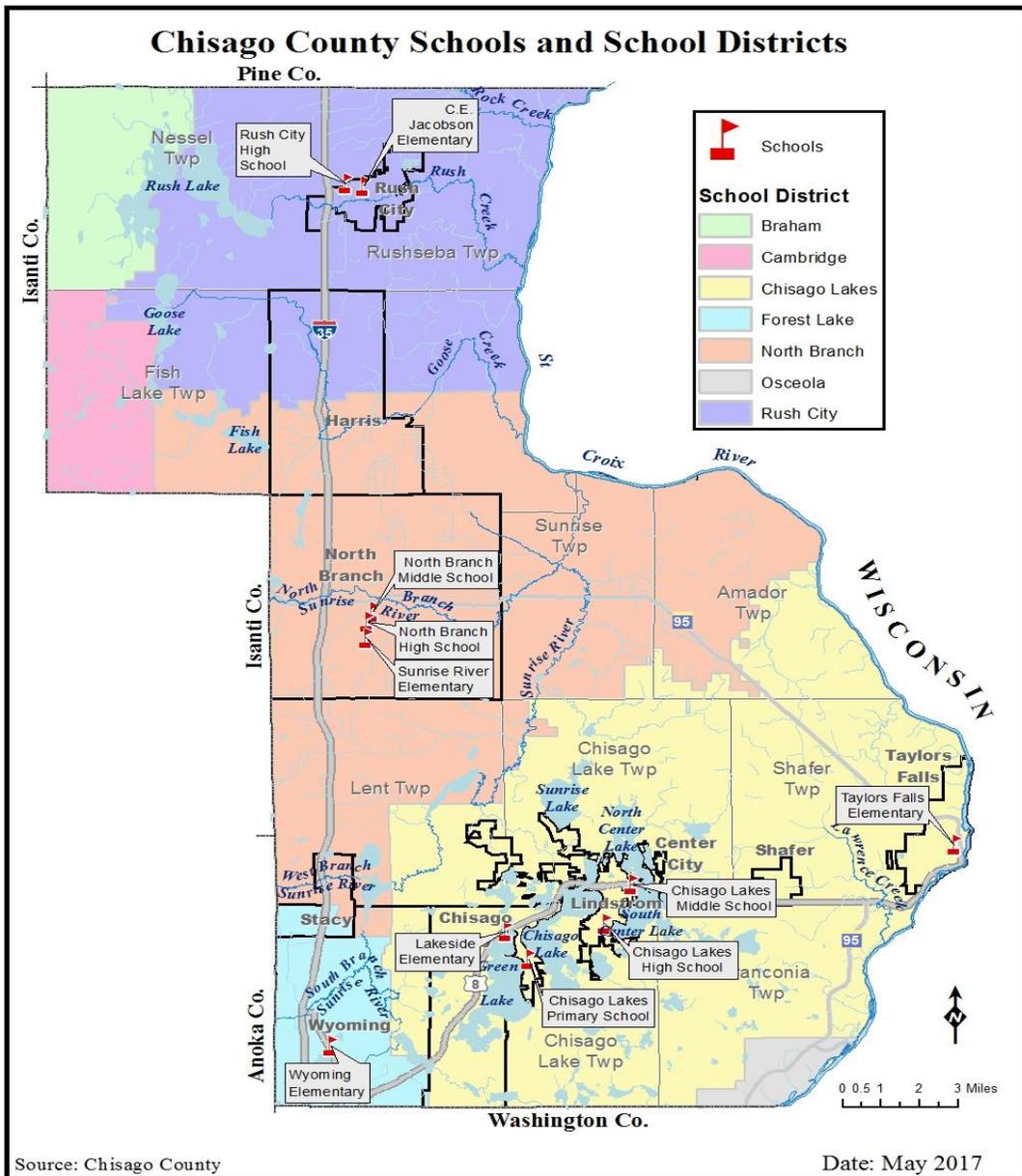
Fire

The fire departments in Chisago County are all volunteer or paid on-call. The fire districts are laid out for very efficient coverage of the county. There are currently fourteen fire departments that service the entire county; three of which are outside the county (Cambridge, Braham and Forest Lake). The Fire District Service Areas are shown on the map on the next page (7-30).



Schools

At one time Chisago County had 39 school districts within the county. Today there are only seven. Three of those districts are completely within the County's boundary (Chisago Lakes, North Branch and Rush City); three are school districts located in communities outside of the County (Braham, Cambridge, and Forest Lake); and there is one common district #323 in the southeast of Franconia Township that sends their students across the St. Croix River to Osceola Wisconsin Public Schools. The school districts in Chisago County are shown on the map below.



Public Libraries

Five public libraries located in the County currently serve the county in Chisago City, Taylors Falls, Wyoming, North Branch and Rush City. Bookmobile service is furnished to the county by the East Central Regional Library at Cambridge. The Forest Lake Library also serves a portion of the county residents.

Solid and Hazardous Waste

The Chisago County Environmental Services Solid Waste Division is responsible for licensing, bonding and inspecting all solid waste operations in the County. Annual license fees for garbage haulers and facilities licenses are set by ordinance and resolution. The solid waste division coordinates the recycling of tires, appliances, electronics and mattresses at several sites around the County in cooperation with the East Central Solid Waste Commission (of which Chisago County is a member) and pays subsidies to the recyclers in order to keep the costs to the residents at a reasonable rate. In addition, the County distributes \$50,000 a year to garbage haulers/recyclers from SCORE funding from the State in order to subsidize the costs for recycling curbside materials with low market prices. The County through contracts, with incentive formulas – distributes the subsidies the more they recycle, the more they earn in subsidies.

The County also operates a Household Hazardous Waste Facility (HHWF) in North Branch for residents of Chisago, Washington, and Isanti Counties and for Minimal Generator businesses (less than 100 lbs/year). In 2015, the HHWF collected about 15,000 gallons of paint from 2,254 Chisago County households, 133 Isanti County households (via a voucher program) and from 16 Washington County residents. The Reuse Shelves at the HHWF provide a means for residents to acquire "used, but useful" products at no charge and for the County to avoid disposal costs for the products reused. In 2015, Chisago County avoided about \$10,000 in disposal costs because of the Reuse Shelves.

Please also see Chapter Two – the Natural Resources Element, for more information about solid waste).

Energy

Chisago County is experiencing steady rates of population and economic growth. This trend will result in increased demand for housing stock, increased need for infrastructure such as sewers, water, highways and government services and more industrial and commercial development. Each new demand for services and infrastructure will result in new demands for energy and there will be increased pressure to expand and improve the energy system infrastructure.

Utilities

Electric power for the county is provided by Xcel Energy, East Central Electric Association and Connexus. Xcel provides services in the southern and eastern sections of the county, while East Central Electric Association and Connexus operate in the western sections of the county.

Northern Natural Gas Company and Minnesota Energy service the incorporated areas and some of the rural areas of the county located near the pipeline. Pumping sites are located along the pipeline in strategic locations. A petroleum products pipeline operated by Magellan Pipeline Company also runs through the county parallel to Highway I-35.

Solar Energy

Chisago County has become a leader in the facilitation and use of solar energy in Minnesota. The County believes it is in the public interest to encourage the use and development of renewable energy systems (including solar energy systems) that have a positive impact on energy conservation with limited adverse impact on nearby properties. As such, the County adopted a solar energy ordinance in 2014 that supports the use of solar collection systems and the development of solar energy farms. Chisago County also finds the development and installation of solar energy facilities should be balanced with the protection of the public health, safety and welfare. It is the intent of the County to have development and installation standards for the reasonable capture and use, by households, businesses and property owners, of their solar energy resource and encourage the development and use of solar energy in Chisago County. The County included standards in the adopted solar energy ordinance to ensure the protection of public safety and the natural resources when solar energy systems and solar energy farms are constructed within Chisago County. This ordinance also set standards for locating and the operation of solar facilities (including Xcel Energy solar gardens and solar farms) in the rural parts of the County.

In 2016, several solar gardens and three solar farms were developed in Chisago County. The largest project, known as North Star Solar, encompasses about 1,000 acres in North Branch, Lent Township and Sunrise Township. It began full operation on December 21, 2016 and has an installed capacity of 100 megawatts (MW). The Minnesota Public Utilities Commission (PUC) permitted this facility as a large-scale electric generating facility. It is the single largest energy facility in the Midwest. County zoning regulations are statutorily preempted by PUC rules for large-scale power producing facilities such as solar farms. The operators of this facility expect it to be operational for at least 25 years. The other solar farms are located on the south side of County Road 14 (Lincoln Trail) near Kable Avenue and on the north side of County Road 37 near Tern Avenue just west of Taylors Falls.

Communications

Frontier Telephone Company services the southern and most of the eastern communities. CenturyLink, with an office in Cambridge (Isanti County) services the northern portion of Chisago County from North Branch to Rush City. Radio and television services to the county are provided from outside the county. Most of this service is provided by the Twin Cities stations. Booster towers are located throughout the county.

There are two independent newspapers operating in the county: The Chisago County Press, located in Lindstrom, which was established in 1898, and the ECM Post Review, located in North Branch, which was formed from a merger of the Rush City Post and the North Branch Review. The Cambridge Star and Forest Lake Times also serve portions of the county.

Broadband (High-Speed Internet)

What is broadband internet and how does it work?

The term broadband commonly refers to high-speed internet access that is always on (do not need to dial up to log on) and is faster than traditional dial-up access. It allows users to download online entertainment such as video clips and music, networking games, listen to digital radio, send-email faster and speeds up everything they do online.

Broadband has revolutionized online activities everywhere for businesses, entertainment and public services. Faster speeds of up to 160 times a dial-up connection brings about new services, including internet television and video on demand, across home, business and public life.

For the majority of those looking to upgrade to broadband internet for the business or home, it is all about the extra speed. High-speed internet is internet access of at least 200 kilobits per second (Kbps). High-speed internet speeds let users take advantage of technologies including video conferencing via computer, voice calls over computers and streaming high quality audio and video.

Benefits and Importance of High Speed Internet

High-speed internet access is a fundamental aspect of the infrastructure of the 21st Century required to educate our youth, create jobs, promote public safety, improve our standard of living and deliver essential services such as health care. The internet modifies and shapes our current society making it more difficult to live without all its benefits. Communication is an essential factor that our world spins around and the internet is the single most important tool that has made the present high speed of communication possible. This key element thus brings us to the benefits of having access to high-speed internet.

Everything from browsing to downloading or using communication software is easier and more comfortable when using high-speed internet. A high-speed internet connection also brings many positive advantages to business owners. While having a low speed connection implies spending less money to an internet provider, on the long-term this is not the best solution for a business user. When running a business, getting the right connections and speed are extremely important in encouraging better communication between the business operator and their clients. It also gives all users access to much more information in a quick and easy manner.

Universal broadband service availability will help the County accomplish many of its economic development objectives. Broadband will help strengthen and retain existing businesses and organizations. Broadband availability also is essential to create and recruit new jobs within the County that need reasonably priced advanced telecommunications services in order to compete in a world economy. New residential and commercial development projects should include the infrastructure components necessary to support modern communication technologies, such as conduit space within joint utility trenches for future high-speed data equipment and flexibility in conduit placement to allow for easy retrofit for high-speed data systems.

Expanding broadband and wireless services to smaller and remote parts of the county will have several additional benefits. Improved telecommunication infrastructure will support public safety and emergency services by improving communications and access to information. Telemedicine, which is the use of communication technology to provide and support health care when distance separates the participants, could help improve health care in Chisago County. Economic development objectives, such as improved tourism, industry diversification, job creation and promoting local businesses will benefit from a stronger on-line presence. Additionally, broadband technology will enable online education opportunities, telecommuting and reduce the need for vehicle trips.

Types of Broadband Service

The major types of broadband include DSL, cable, satellite, fiber-optic and mobile broadband. The following provides information about each of these broadband services.

DSL

Digital subscriber line (DSL) is broadband internet delivered over traditional copper telephone lines already installed to homes and businesses. The lines are split into two frequencies: one for data and one for voice. Traditional DSL speeds range from 768 Kbps to as fast as 7 Mbps – but must be located within 2 miles of the telephone company’s central office or company facilities for optimal speed.

Fiber

Fiber-optic broadband, commonly referred to as “fiber,” is broadband internet delivered over fiber-optic lines – these use light to transmit data signals at far faster speeds than traditional copper wires or coaxial cable. The fiber optic technology converts electrical signals carrying data to light and sends the light through transparent glass fibers about the diameter of a human hair. Fiber transmits data at speeds far exceeding current DSL or cable modem speeds – typically by tens or even hundreds of Mbps. Variations of the technology run the fiber all the way to the customer’s home or business, to the curb outside or to a location somewhere between the provider’s facilities and the customer.

Cable

Cable broadband internet delivers data at broadband speed over the same coaxial cables used to deliver television pictures and sound to your television set. Users can still watch cable television while using the internet. Basic cable internet speeds range from 6 Mbps to 18 Mbps, while more advanced cable internet can reach speeds of 75 Mbps and more. The type of cable modem, the cable network and the number of users

within the same vicinity using the same cable connection can affect cable internet speeds.

Satellite

Satellite broadband uses orbiting satellites to transmit and receive broadband data. Satellite broadband is primarily used in areas where land-based broadband technologies such as DSL, fiber and cable are unavailable – usually in remote or sparsely populated areas. Speeds for satellite broadband are comparable to traditional DSL, ranging from 768 kbps to 5 Mbps – but data speeds can be affected by several factors, including the provider and service package in use, the consumer’s line of sight to the satellite and changes in the weather. Extreme weather conditions can disrupt satellite service.

Mobile Broadband

Mobile networks are wireless broadband technology accessible via 3G/4G/LTE enabled cell phones and smart devices. Speed differs between carriers and can be affected by user location and carrier coverage. The fastest wireless technology, LTE, offers a maximum theoretical download speed of up to 150 Mbps.

Any of the above technologies can be connected to a wireless router, providing wireless internet access (“Wi-Fi”) to devices within range of the router.

Why is broadband or high-speed internet service important?

Broadband is the great infrastructure of the 21st century. Communities and regions that develop their broadband infrastructure will have better, faster access to new ideas, innovations and technologies. Being connected means having more and better jobs, a stronger educational system, a more efficient government, more effective public safety and health care providers and a better quality of life.

In today’s digital society, the internet is king. More and more of our daily activities run online and the internet is now many people’s source of television and telephone service. One can shop, talk, share, learn, conduct business or manage their bank account on the internet. Millennials (those 30 and younger) especially expect the highest internet speeds. Just like parks, trails and other community amenities, the presence of adequate and desirable internet access has become not only a quality of life asset but also an infrastructure necessity.

Chisago County’s population is projected to grow from 54,293 in 2015 to 63,671 by 2020 (an increase of 17.3 percent) and to 68,071 by 2030 (an increase of 25.4 percent from 2015). As the population continues to grow and the internet becomes more essential for all sectors of the population, County staff expects the demand for residential broadband to rise dramatically. This will be true for both suburban and rural populations as residents continue to adapt to an increasingly networked culture and competitive, globalized economy.

As employment continues to shift toward industries that require advanced technological skill and more connectivity, an up-to-date broadband network will be essential for securing economic opportunities and preserving and improving the quality of life in the

county. Additionally, industries that traditionally have not used broadband are becoming more dependent on it. For example, in the farming industry, farm owners and operators are using mobile devices with broadband connections for purposes such as logging worker hours and tracking vehicle locations.

Telecommunications infrastructure and service (including broadband internet) are critical to businesses for economic growth and job creation. Residents rely on telecommunication for quality of life, education, research and access to health care and government services. Since Chisago County has rural areas with a dispersed population, there are parts of the County that lag in access to reliable telecommunications services as compared to the cities of Wyoming and North Branch.

Instead of thinking that “everyone” is connected (to the internet), we now need to remember that “everything” is connected. According to Google, Americans will average 50 internet-connected devices in their homes by the year 2020 – all running on broadband networks that need to handle the internet traffic. This means that the developers and owners of buildings (and internet systems) will need install their internet systems with that level of connectivity built in, or face expensive retrofits.

Why a high-speed internet connection is important in a home.

According to the Pew Research Center, 73 percent of Americans in 2015 accessed the internet on a daily basis and 1 in 5 reportedly went online “almost constantly.” This use may be for one of several reasons, but it is clear that the internet is an increasingly essential part of everyday life.

The US Census Bureau recently reported that more and more American adults are working from home, with millions of employees across the country opting to telecommute rather than physically travel to an office or work space. There are several benefits associated with this trend. An individual can save money on fuel and avoid the stresses of rush hour commuting. This also can allow parents to stay home with a sick child or family pet. For anyone choosing to work from home, however, a slow or inconsistent internet connection can be a disaster. It may compromise your ability to finish important projects and make the entire prospect of telecommuting impossible. For anyone who is self-employed, this can be a critical issue.

Any children in the home are likely to rely on the Web for their homework. There is now an expectation that American students have reliable home internet connection but if the connection is malfunctioning or slow, the children may need to be driven to the library or school to get work done. The internet has become an important resource for anything from cooking to home repair. Countless websites and blogs host helpful content that can aid homeowners (and businesspersons) in daily tasks. Without reliable internet, it can be impossible to access these tools.

A high-speed internet connection is essential for the most pertinent tasks in a person’s life, but it also can be quite useful when it comes to relaxing. This is because there are many entertainment options that rely on the internet and web-enabled technologies.

There are live-streaming music platforms and online music services, video game devices and web-enabled televisions to stream movies online. Without a strong internet connection, using these types of services can be very difficult. In addition, the internet also is a powerful tool when it comes to communicating with loved ones. To use email, video messaging or Skype, there must be reliable internet service.

With more things moving online, it is more important than ever to have fast reliable internet access readily available in all of Chisago County.

2015 “Got Internet” Survey

In the spring of 2015, Chisago County distributed a “Got Internet” survey to Chisago County residents and it was completed in June 2015. The survey received 879 responses making it statistically significant and it provided an accurate sampling of the county. It provided useful information of who the internet providers were at that time, how satisfied the residents were with their internet service and how important broadband and technology was (and is) to Chisago County residents.

When asked what they would likely do if they had high-speed internet access, Chisago County residents responded as follows:

Telecommute – The opportunity to telecommute was a very significant to Chisago County residents as there is a large commuting population in the county. The survey reported that 26 percent of the respondents currently telecommute while another 23 percent said they would telecommute with faster broadband speeds. Keeping residents in the county strengthens the County as they then shop locally, volunteer locally and drive less. In 2015, 66 percent of County residents commuted 30 miles or more to work.

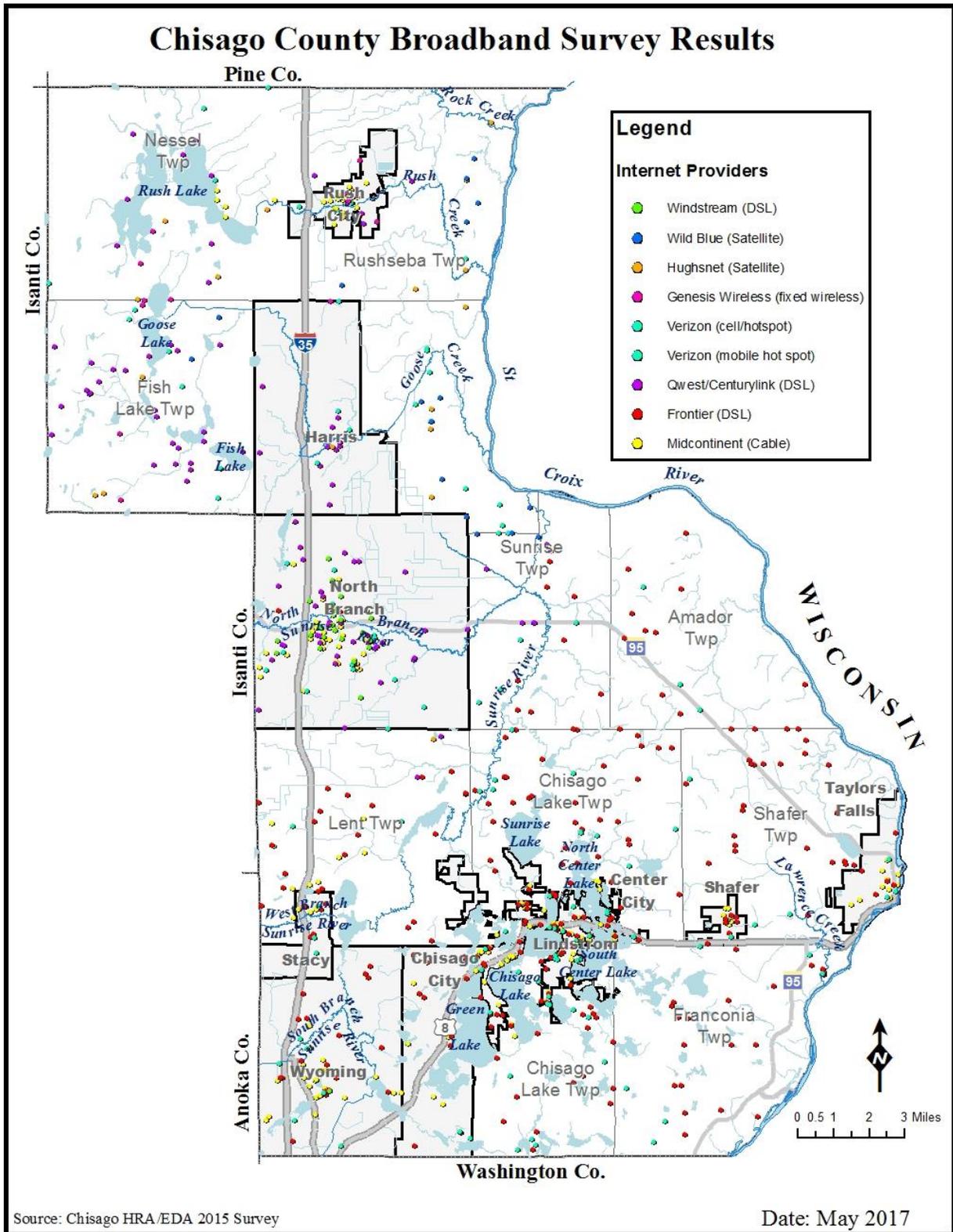
Education – 45 percent said they would use high-speed internet for student access. Students in K-12 are often required to use on-line tools. Without high-speed internet, students cannot access their schoolwork. With high-speed internet, residents could take college classes while living in Chisago County.

Quality of Life – 86 percent said they would use it for web surfacing and social networking. In addition, 20.4 percent said they access telehealth, 79.8 percent said they would get entertainment and 36.5 percent said they would use high-speed internet for gaming. Many of the survey responses stated that when they look for a new home they look for good internet access and higher speeds. If it is not available, they said they would look elsewhere.

Most of the surveyed respondents considered broadband as an essential utility.

Economic Development – 31 percent said they would operate a business with better internet access. Higher internet speeds allow a business to innovate and grow. It is necessary to have high-speed internet for business expansion in Chisago County.

Chisago County Broadband Survey Results



Source: Chisago HRA/EDA 2015 Survey

Date: May 2017

Based on these survey results and the experiences of County staff, there are several key telecommunications issues in Chisago County:

Access/Coverage. This is the single biggest issue. There is a digital divide within the county. Broadband (high-speed) internet is not available to about one-half of the County and there are parts of the County where cellular telephone coverage is less than desirable. The difficulty for the unserved outlying areas is their local incumbent providers have not shown interest in expansion and new providers are often hesitant to enter a market where the more profitable nearby areas that are already served.

Reliability. Reliability has a different meaning in each part of the County, as there are a variety of service providers for both telephone and internet.

Applications. Residents want access to government services, forms and public meeting and better bandwidth to take advantage of advanced applications, such as telemedicine, distance learning, VoiP (Voice over Internet Protocol), transfer of large files and streaming audio and video.

Education/Awareness. Residents want to be more educated in technology skills and more aware of the potential of telecommunications. This includes training workers in tech skill, training businesses and increasing awareness among public and elected officials.

Advocacy. This needs to happen at all levels – locally, statewide and nationally. Residents want the County to advocate for telecommunication improvements actively with state and national elected officials, the Minnesota Public Utilities Commission and the Federal Communications Commission (FCC).

Conclusion

“Broadband is the indispensable infrastructure of our 21st Century economy” according to Julius Genachowski, Chairman of the Federal Communications Commission (FCC). Planning to meet current broadband infrastructure needs and future broadband infrastructure demand is a critical task for communities and regions who desire to compete and excel in an increasing global economy. Public-private partnerships are a valuable tool that, when properly coordinated, can implement the goals, strategies and actions necessary to improve broadband service in Chisago County. As with any partnership, the keys to avoiding conflict are communication and cooperation. Public and private investment in broadband can exist side-by-side, benefitting one another and the community at-large.

Inventory of County Facilities

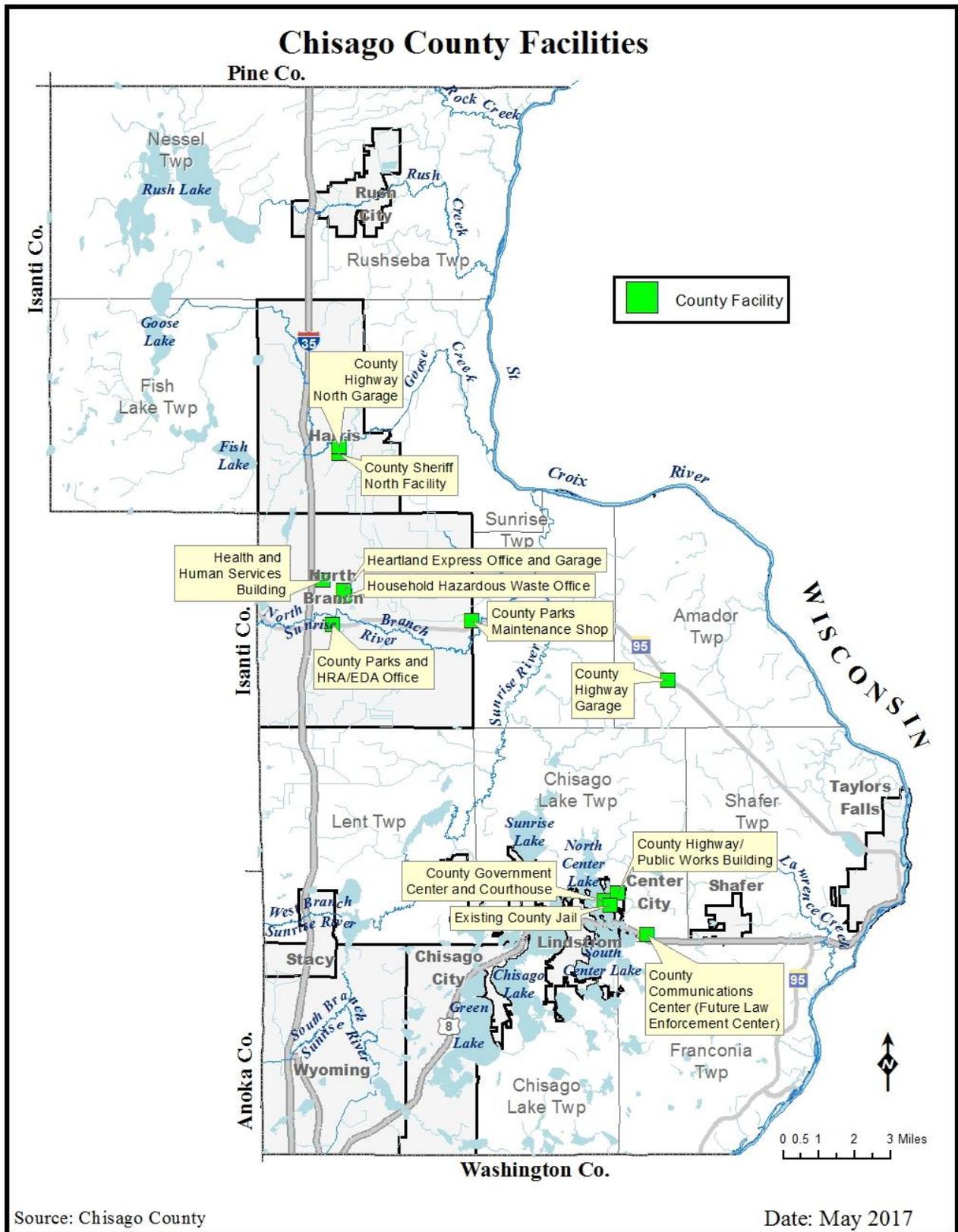
Chisago County owns, operates and manages several facilities, buildings and sites throughout the County. The county has sited and designed these buildings and facilities to correspond to the type of services that the county is providing. They include:

- County Government Center and Courthouse – 313 N. Main St., Center City
- County Communications Center (and future law enforcement center) – 15140 Per Road, Center City
- County Highway/Public Works Building – 31325 Oasis Road, Center City
- Health and Human Services Building – 6133 402nd St., North Branch
- Household Hazardous Waste Office – 39649 Grand Avenue, North Branch
- County Parks and HRA/EDA Office – 38871 7th Avenue, North Branch
- County Sheriff's North Facility – 43567 Forest Blvd, Harris
- County Highway North Garage – 43743 Forest Blvd, Harris
- County Parks Maintenance Shop – 39012 Keystone Avenue, North Branch
- County Highway Garage – 37300 Park Trail, Center City (Almelund)
- Heartland Express Office and Garage – 39840 Grand Avenue, North Branch
- Existing County Jail – 111 N. Main Street, Center City

The map on page 7-42 shows the location of these County facilities.

Sustainable Building Practices

Sustainable building, sometimes called “green building”, is the practice of designing, constructing, operating, maintaining and removing buildings in ways that conserve natural resources and reduce pollution. It means creating a building that is healthier and more comfortable for its occupants, consequently enhancing well-being and productivity. A sustainable building is more than efficient lighting and water conservation. It involves thinking differently about how to design and operate a building, choosing the site and selecting building materials. In recognition of the economic, human and natural resource benefits of sustainable building, Chisago County should adopt sustainable building practices and guidelines for use in future building and renovation projects.



Infrastructure Goals & Policies

Goal: *Promote policies for financing public facilities that are equitable for all citizens of the County and that reinforce the County's land use and development policies.*

Policies:

1. Require developers to cost share on the necessary public improvements resulting from their proposed development.
2. Discourage non-contiguous annexations, but planned, staged growth that builds upon existing infrastructure.
3. Encourage communication and participation in regional planning efforts.
4. Identify public investment needs by accounting for the full environmental, social and economic cost of new development, including but not limited to infrastructure costs such as transportation, sewers and wastewater treatment, water, schools, recreation and open space.
5. Ensure the most effective and efficient use of public resources by the following:
 - A plan shall be in place to determine future demand for resources and the County's response to those needs.
 - The cost of cumulative social and environmental cost shall be taken into consideration when considering new development.
 - Quantify the extent of future demand for new and improved infrastructure.
 - Quantify the ability of Chisago County to absorb and fund these demands.
 - Determine the finite level of demand to which Chisago County can respond.
 - Identify the cost of infrastructure.
 - Identify funding mechanisms necessary to cover the costs of the infrastructure.
6. Support research and educational opportunities for the public concerning growth factors as it pertains to planning and resource management.
7. Actively explore opportunities for all jurisdictions, agencies and public organizations in the area to share services and resources to reduce or eliminate duplication and improve efficiency while still providing appropriate levels of service.
8. Continue to support existing joint governmental ventures in the delivery of services.
9. Continue to maintain community facilities and identify areas of improvement in a capital improvement plan.
10. Continue to improve and update when possible the County's public service capabilities using training, upgraded facilities and equipment and improved management practices.
11. Chisago County acknowledges the seriousness of private property acquisition, the just and equitable treatment of landowners and the importance of fair, impartial and professional determinations of property

values when considering land acquisition for public uses or purposes. In addition, the County recognizes the importance of property owner's rights when considering public improvement, public facilities or other County-related public purpose projects. As such, the County will negotiate in good faith and in an open manner with property owners when the County Board decides that land acquisition is necessary for public uses or facilities.

Goal: Chisago County will provide the necessary public facilities in a cost effective and efficient manner that maximizes public health, safety and welfare while meeting the needs of the current and future population of the County.

Policies:

1. Encourage all cities to develop plans for guiding the expansion and maintenance of public water and sewer facilities. The community utility plans should reinforce the County's land use and development policies and be consistent with the community growth area plans.
2. Avoid locating public facilities and utilities in areas designated as special environmental overlays, sensitive biotic communities or long-term rural areas.
3. Discourage the extension of public utilities over large undeveloped parcels and prime agricultural areas to serve new scattered rural residential and commercial development.
4. The County will support the researching of the feasibility of providing or extending public utilities to existing rural residential areas if mutually beneficial.
5. Encourage cities to develop policies and programs for financing public utilities that do not place an undue tax burden on large undeveloped parcels of land.
6. Identify opportunities to co-locate services with other agencies.
7. Consider alternatives to constructing new facilities such as shared workspaces, the use of video/teleconferencing and telecommuting where applicable and automating services where appropriate.
8. Monitor new technologies and identify those that may be appropriate for County use.
9. The County will incorporate sustainable building practices to include sustainability principles and energy conservation and encourage the use of sustainability principles and practices into County plans and programs.

Goal: Ensure the citizens of Chisago County access to necessary services to maintain a healthy life style.

Policies:

1. Work with Public Health and the cities to develop strategies for evaluating current and future needs of the community and access to health services.
2. Monitor population trends and map the location of various services.

3. Work with the cities to ensure the trends in population are recognized and participate in developing strategies for coping with these trends.
4. To connect and improve bicycle and pedestrian facilities, the County should:
 - Collaborate with local cities, MnDOT, nonprofit organizations and other partners about the planning and construction of the expansion of these facilities to increase these modes' share of regional trips by encouraging local jurisdictions to:
 - Recognize the planning and building of bicycle and pedestrian facilities as a component of new development and of redevelopment.
 - Plan and build bicycle and pedestrian facilities as component of new street construction and street reconstruction.
 - Include bicycle and pedestrian plans in their Comprehensive Plans.
 - Work with local partners to plan, construct and maintain bicycle and pedestrian connections to local trails, area parks and to regional and state trail systems.
5. To promote healthy communities and active living through land use, planning and public investments, the County should consider working with its partners to:
 - Incorporate active living considerations when evaluating and planning infrastructure investments and operations.
 - Encourage local communities to conserve, protect and interconnect local open spaces and parks to provide seamless active living experiences across systems, including local parks, County parks, open spaces and green corridors.
 - Promote walkable neighborhoods, pedestrian-friendly town centers and compact development to expand the walkability of the County.
 - Expand the bicycle and pedestrian infrastructure by connecting and improving existing facilities.
 - Encourage policies and investments that improve access to safe and healthy food.

Chisago County Telecommunications Goals and Policies

Goals

1. **Availability.** Telecommunication availability to every resident, business and institution in Chisago County at a level of service and price comparable to statewide availability and standards.
2. **Broadband Access.** An advanced broadband internet infrastructure that reliably connects Chisago County to national networks and extends throughout the entire County.
3. **New Construction.** Broadband service capacity integrated into new buildings and developments.
4. **Telecommunication Facilities.** Orderly and appropriate development of wireless telecommunication facilities in the County to achieve reliable access in a manner that will protect and promote public health and safety; prevent visual blight; preserve the County's rural and scenic character and protect natural, scenic and cultural resources.
5. **Vision.** Develop a broadband vision for Chisago County by working with local public agencies, schools, health care providers, economic development officials, utilities and service providers and plan to form a public/private fiber initiative that provides leadership and focus for collaborating and deploying Countywide fiber or broadband infrastructure and services.

Policies

1. **Development of Telecommunications Infrastructure and Services.** Advocate for the development of telecommunications infrastructure and services to facilitate the use of the best available technology for business, households and government. Advocacy for the improvement of telecommunications and broadband requires local champions to tell the story of the role of broadband as the indispensable infrastructure of our age to create a sense of urgency and to make sure broadband is included in the conversations about economic development, health care, education and an increased standard of living.
2. **Broadband Service Reliability.** Support efforts to increase reliability and continuity of service by broadband telecommunications providers through market development, installation of redundant infrastructure, diversification of providers and system modernization.
3. **Promotion.** Promote the adoption of broadband technologies to support business innovation, enhance delivery of local services, realize cost efficiencies, engage citizens and support sustainable applications.
4. **Telecommunications Facility Siting.** Design and site all telecommunication facilities to minimize their visibility, prevent visual clutter and reduce conflicts with surrounding land uses.

5. **E-government Infrastructure.** Continue to expand and improve the County's website and telecommunications service capabilities, including the use of geographic information system resources, to provide transparency, as a source of public information, as an aid in the delivery of public services and to engage citizens.
6. **Telecommunications Facilities within County Rights of Way.** Encourage telecommunications service providers to size underground and overhead facilities to accommodate future expansion, changes in technology and, where possible, the facilities of other telecommunications providers.
7. **Telecommuting.** Telecommuting and home-based businesses that use internet shall be encouraged in the rural residential and agricultural zoning districts of Chisago County to create jobs, reduce transportation impacts and to improve air quality.
8. **Broadband Internet.** Promote the provision and installation of advanced broadband infrastructure in all parts of Chisago County.
9. **Broadband Competition.** Promote competition for broadband service that will foster affordable internet access and advocate for reliability through redundant infrastructure.
10. **Workforce Development.** Continue to work with local businesses to identify special telecommunications needs and to ensure there are a variety of service providers available to address those needs.
11. **E-911.** Ensure the County's radio, telecommunications and internet services are capable of providing timely emergency information and facilitating rapid and reliable emergency response.
12. **Wireless "Hot Spots".** Support public hot spots and computer centers so all citizens can access technology and fully participate in the community. This could include the installation of public-use wireless broadband antennas at every County-owned building.
13. **Trip Reduction.** Encourage telecommunications infrastructure improvement as a means to reduce transportation impacts and improve air quality.
14. **Technology Awareness.** Promote awareness of broadband telecommunications technology by businesses and residents.

INTERGOVERNMENTAL COORDINATION & COMMUNICATION ELEMENT

September 2017



Chisago County Comprehensive Plan 2017

Intergovernmental Coordination & Communication

In order to provide the most effective and efficient infrastructure, ensure compatible land uses with adjacent jurisdictions and enhance natural and cultural resources, it is necessary to coordinate levels of service between the county, various townships and cities. Partnerships should be fostered between the County with its townships and cities and with state and federal agencies. Maintaining and improving intergovernmental coordination is essential for the county. This applies to other governmental entities as well as those within the overall government structure.

Many of the issues that have been raised throughout the Comprehensive Plan update process have included some aspect of the need for better communication and coordination between governmental jurisdictions, county departments as well as with county residents. This section will identify goals and policies to aid in assisting the process of creating better intergovernmental coordination and communication.

Federal Government

The federal government has impacts on Chisago County. The most important function of the Federal government involves the provision and funding of a number of services. These federally supported services include the Soil and Water Conservation District, Farm Services Agency, Army Corps of Engineers and the National Park Service. In addition, the Federal government supports many public programs that provide assistance to the county both directly and indirectly. Some of these programs are: Revenue-Sharing; REAP (Rural Energy for America Program) and AFDC (Aid to Families with Dependent Children).

State Government

The state government is the main governing body of the county and its local units. The state issues all privileges and authority to counties and municipalities. The state legislature is the body that passed county enabling legislation. This legislation provides guidelines for county and municipal ordinances. Two important pieces of this legislation affecting Chisago County are the State Enabling Legislation for county planning and zoning and the Shoreland Management Act, which were enacted in 1959 and 1969, respectively. The State owns a significant amount of land in the County mainly in the Carlos Avery Wildlife Management Area, Janet Johnson Wildlife Management Area, Wild River State Park and Interstate Park; along with land in Aquatic Management Areas, Wildlife Management Areas (AMA's and WMA's) and some smaller parcels.

County Government

The county government is administered by five commissioners from their respective districts. The county government acts as an administrative arm of the state. It enacts ordinances that fit within the state guidelines. Chisago County administers many different programs - some mandated by the federal and state governments and others that are granted through enabling legislation.

City & Township Government

Within Chisago County, there are ten incorporated cities and nine townships. Each of the incorporated cities has their own planning and zoning regulations. In the southern portion of the county, many of the infrastructure issues are the same and some infrastructure items are being consolidated or being conducted on a joint effort; such as, a joint wastewater treatment facility, police services and library services. (See Infrastructure Element for more details.) Of the nine townships, only one township currently has its own comprehensive plan and zoning regulations, the township of Lent. This township has developed a zoning ordinance pursuant to Minnesota Statutes 394.33 (Town Powers) that is consistent with (and must not be inconsistent with or less restrictive than) the County zoning regulations currently in place. A brief summary of the ten incorporated municipalities and nine townships of Chisago County are listed below.

Incorporated Municipalities of Chisago County:

Note: All 2016 population estimates are from the Minnesota State Demographic Center

Center City

Center City has been the county seat since 1875. Its name refers to its central location between Chisago City and Taylors Falls. It is the state's oldest continuously inhabited Swedish settlement. The first post office was named Centre City in 1858, then Chisago Lake in 1863, then back to Centre City in 1877 until 1893 when the current "Center City" name/spelling was adopted. The village was not officially incorporated until 1903. The Chisago County Government center and jail are located in Center City. In 2000 the population of Center City was 582 residents. By 2010, the population of Center City had grown to 628 residents and was estimated at 609 persons in 2016. Center City has a mayor elect and four council members. A planning commission advises the council on planning and zoning related matters. Center City last updated its Comprehensive Plan in October 2009.

Chisago City

Chisago City was first platted for village lot development in 1855 and was incorporated in 1906. It served as the county seat from 1865 to 1875. Chisago City is located on Minnesota Highway 8, just ten miles east of Interstate Highway 35 and only 35 miles northeast of Minneapolis-St. Paul in the Chisago Lakes Area of Chisago County. The city had a population of 2,622 in the year 2000. The city recently expanded its residential and commercial properties. Lakes and scenic park areas surround the entire city. In 2005, after a contested annexation case, approximately 5,000 acres from the former Wyoming Township was annexed into the city of Chisago City. After the annexation occurred, the population of Chisago City grew to 4,967 in 2010 and was estimated at 5,272 in 2016.

Chisago City adopted its Comprehensive Plan in 2002 and updated it in 2006 due to the addition of the nearly 5,000 acres added to the city's jurisdiction. Chisago City has a mayor-council form of government. The city council consists of a mayor and four council members, who are elected at large. The mayor and the council members serve four-year terms. A city administrator is responsible for the administration of policies and carrying out of city council directives. A planning commission advises the City Council on planning and zoning issues and a park board makes recommendations to the Council on park related items. An Economic Development Authority (EDA) was created to establish a strong economic environment for the City to support existing businesses and encourage the establishment of new businesses. The EDA recommends policies supportive of economic growth to the council.

Harris

Harris is a relatively small quiet rural community. It has a large land base of 12,800 acres and a relatively small population. Much of the City is in agricultural or open space uses and is largely undeveloped at this time. The City of Harris is located in northern Chisago County and has Interstate 35 running through it.

Harris is one of the oldest established communities in Chisago County. The Harris area first settled during the latter half of the 1850's when homesteaders of mainly Swedish origin migrated into northern Chisago County. In 1873, the first plat for the town site of Harris was filed with the County. A small settlement sprang up along the railroad line and took its name in honor of Philip S. Harris, a prominent officer of the early St. Paul and Duluth Railroad. On July 22, 1884 the Town of Harris was incorporated. It initially included 24 square miles of territory. Three years later, Harris was officially incorporated as a village with 20 square miles and four sections were returned to the jurisdiction of Sunrise Township.

Harris has a mayor and four council members and a City Clerk. In the 2000 census Harris had a population of 1,121 residents. The 2010 Census showed 1,132 residents in Harris and in 2016, the State estimated the population at 1,133 persons. The City approved the most recent Comprehensive Plan for Harris in 1999 and they are currently working on an update to the Comprehensive Plan that the City expects to finish in 2017.

Lindstrom

Incorporated in 1894, the City of Lindstrom serves as the center of the Chisago Lakes area with its many recreational opportunities. Within close proximity to the Twin Cities Metro, Lindstrom has retained its small town character, with a special emphasis on Swedish heritage. The City is working to increase quality commercial development, while at the same time preserving the small town atmosphere. The 2000 census estimated the population of Lindstrom at 3,015 people. By 2010, the population of Lindstrom had grown to 4,442 and in 2016, the estimated population of Lindstrom was 4,503.

Although not incorporated until 1894, the initial settlement of the area around Lindstrom took place during the early and mid 1850's. At that time, the similarity of the area's

topography to that of the Swedish countryside brought Scandinavian homesteaders up the St. Croix River from Stillwater. They moved inland from Taylors Falls and Franconia to the greater Chisago Lakes area. The construction of a branch rail line by the St. Paul and Duluth Railroad through the Chisago Lakes communities in the 1880s helped speed area development. Within a few short years the Chisago Lakes Area grew with new resorts, seasonal cabins and the necessary supporting businesses.

Many of the area's residents are descendents of those original Scandinavian settlers and they continue to take pride in their Swedish heritage. A statue of the trilogy's fictional main characters, Karl Oskar and his wife Kristina, stands in the center of Lindstrom as a tribute to those early men and women who set an example for the conscientious, hard working descendents who still populate the area.

Lindstrom has a mayor with four council members and a full time administrator. In 2000, the City of Lindstrom and the township of Chisago Lakes participated in a joint planning process from which the city adopted a comprehensive plan in 2001. Due to the rapid increase in population and increasing demand for development, the city updated its comprehensive plan in 2005. The City is now in the process of updating its Comprehensive Plan that should be finished in 2017.

North Branch

North Branch is named for the north branch of the Sunrise River. The village was platted in 1870 when the railroad through the area was finished and incorporated in 1881. Also known as the "hub of the potato belt", 527 rail cars of potatoes were shipped from the local station in the fall of 1911. In 1901, Branch Township was split off from the village; it was reunited with the village in 1994. The current City of North Branch was formed in 1994 from the consolidated cities of Branch and North Branch. The total land area of North Branch after consolidation became 36 square miles.

The City of North Branch has a mayor-council form of government and a city administrator, as well as full-time planning, building inspections and public works staff. The city also has a park board and an economic development authority. On January 3, 2017, the City Council decided to study the roles and responsibilities of the Planning Commission. In June 2017, the city reformed its Planning Commission deciding they will meet monthly to handle planning related matters. A comprehensive plan was adopted in 1995 after the cities merged and this plan was updated in 2003 and in 2009. In the year 2000, North Branch had a population of 8,023. In 2010, the US Census counted 10,125 residents in North Branch and the state estimated the population in 2016 at 10,469 residents.

Rush City

Rush City, located in northern Chisago County, is approximately 4 miles west of the Wisconsin border and is about 55 miles north of the Minneapolis/St. Paul Metropolitan Area with Interstate 35 running through the city. Rush City now occupies an area of approximately 3,950 acres. This increase in land area is due to recent annexations of property from the surrounding townships into the City.

The original settlement of Rush City was known as Rushseba and was located on the Government Road a few miles east of the present-day City. The original settlement included a flour mill, stagecoach stop and a sawmill. Logging was a main industry in the area and later agriculture. Potato crops were one of the main industries in Rush City. The first school opened in 1856 and the first post office in 1859. In 1869, the railroad was built and the town moved to the present-day location. The City became a municipal corporation in 1873 and a statutory city in 1974.

The population of Rush City in 2000 was 2,102 residents. In 2010, Rush City, according to the Census, had 3,079 residents and in 2016 the State estimated the population at 3,072 residents. Rush City has a mayor-council form of government and a full-time city administrator. The city has an economic development authority of its own. Rush City adopted its first comprehensive plan in 1967 which was then updated in 1980 and 1997. The city most recently updated their Comprehensive Plan in 2009.

Shafer

Shafer is a city in transition from rural to urban in nature and was rapidly growing. The city is situated along both sides of US Trunk Highway 8 approximately six miles west of the Wisconsin border. The city of Shafer was first settled by Swedes in 1853 and called Taylors Falls. It was renamed in 1873 for Jacob Shafer who as early as 1847 cut hay in the local meadows. The village was settled and its first post office established in 1881 when the railroad arrived. As many as six trains a day passed through the village in its prime. The city was incorporated in 1922 and originally developed because of the influence of the now abandoned railroad branch line that extended east-west through the community.

The 2000 census indicated that the city of Shafer had a population of 343 residents. By 2010, the population of Shafer had grown to 1,045 and in 2016 it was estimated at 1,050 residents. The City now occupies approximately 810 acres of which about 75% is developed with urban uses. Due to the amount of wetlands within the city limits, 107 acres remain within the corporate limits to accommodate most types of future land uses. The City of Shafer has a mayor-council form of government and a planning commission that makes recommendations to the council on planning and zoning related issues. Shafer adopted a comprehensive plan in 1999 which was revised in 2002 and 2012. The City is expecting to update their Comprehensive Plan in 2017.

Stacy

The city of Stacy is located along the Interstate 35 corridor on the western edge of Chisago County. Stacy was originally called Middle Branch for its location near the middle of the bank of the Sunrise River; it was renamed in honor of Dr. Stacy B Collins, an early resident, when the railroad came through. The post office was established in 1873. The village was not incorporated until 1923.

Stacy has a mayor-council form of government. In 2000, the population of Stacy was 1,322 residents whereas the 2010 Census counted 1,456 persons in Stacy. For 2016, the State estimated Stacy's population at 1,505. Stacy revised its comprehensive plan in July of 1997 and adopted the most recent version on August 10, 2016.

Taylors Falls

Taylors Falls is located on the eastern edge of Chisago County nestled on the banks of the St. Croix River. Taylors Falls played a key role in the early settlement of the county as a logging town and a steamboat landing. The city served as the county seat from 1851 to 1865. The largest log jam ever recorded in Minnesota occurred here in June 1886 on the St. Croix River and stretched for two miles. Today tourism is the major industry of the city, as many of the historical resources still exist in the city as well as nearby Interstate State Park.

Taylors Falls has a mayor-council form of government, a planning commission, park commission, heritage preservation commission and an economic development commission. The population of Taylors Falls in 2000 was 951 residents and by 2010, the population had grown to 976 residents. In 2016, the State estimated the population of Taylors Falls at 1,011 residents. The city completed an update of its comprehensive plan in January 2008.

Wyoming

The city of Wyoming is located in southwestern Chisago County along the Interstate 35 corridor approximately 30 miles north of the Twin Cities. The city contains a significant portion of the Carlos Avery Wildlife Management Area. Wyoming derived its name from Wyoming Valley in Pennsylvania. A colony of German and Dutch families from that region originally settled here in 1855. One of the early settlers, Lucius Trombler built a three story hotel that was the first stop north of St. Paul on both the stage coach and railroad lines. The village was platted in 1869, after the completion of the St. Paul and Duluth Railroad. Ten years later a branch railroad line was built from Wyoming to Taylors Falls that operated until 1948.

The city of Wyoming has a mayor-council form of government, a full time city administrator, a planning commission, parks and recreation board and economic development authority. In the 2000 the census count for the city was 3,048 residents. The city of Wyoming's comprehensive plan was adopted 2000, was updated in January 2009 and a new update began in 2016. With the 2005 boundary changes and new development, the population of Wyoming grew to 7,791 in 2010 and was estimated by the State at 7,906 residents in 2016.

CHISAGO COUNTY POPULATION INFORMATION

	2000	2010	2016
Chisago County	41,101	53,887	54,766
Center City	582	628	609
Chisago City	2,622	4,967	5,272
Harris	1,121	1,132	1,133
Lindstrom	3,015	4,442	4,503
North Branch	8,023	10,125	10,469
Rush City	2,102	3,079	3,072
Shafer	343	1,045	1,050
Stacy	1,278	1,456	1,505
Taylors Falls	951	976	1,011
Wyoming	3,048	7,791	7,906
City Total	23,085	35,641	36,530

Sources: Years 2000 and 2010 – US Census; 2016 – Minnesota State Demographers Estimate

Townships of Chisago County

There are nine townships in Chisago County:

Amador	Franconia	Rushseba
Chisago Lake	Lent	Shafer
Fish Lake	Nessel	Sunrise

Townships are the original form of local government in Minnesota, established as part of the Northwest Ordinance of 1787 which created the State of Minnesota. The term Township generally refers to organized but unincorporated communities governed by a local board of supervisors and created to provide services to their residents.

Current townships are actually the result of Article 12, Section 3 of the State Constitution and Minnesota Statute Chapter 379 that governs the creation of new townships. The boundaries of townships reflect mergers, annexations into cities and the organization of new townships in smaller but more densely populated areas of counties. Townships have historically been viewed as rural areas with agriculture as their primary industry.

Township powers are derived from State Statutes – primarily Chapters 365 – 368. Townships must comply with State mandates and on some issues the township can be ordered to do things by the county of, in the case of planning and zoning, must be consistent with or more restrictive than county regulations. The type of services provided by townships in Minnesota vary from community to community. These range from road maintenance, volunteer fire department services, park and recreation services and cemeteries. Joint powers arrangement and service contracts also are popular ways for townships to provide services intended to benefit township residents and protect the public's health, safety and welfare.

Amador Township

The St. Croix River forms the township boundary on the north and east. Amador Township was organized October 11, 1859. The township of Amador contains a small unincorporated village of Almelund, founded by John Almquist that is located along Minnesota State Highway 95. Northern States Power Company (now known as Xcel Energy) once owned many acres of land in Amador Township that is now a part of the Wild River State Park. Amador Township does have its own fire hall. Today Amador Township is primarily home to farms and country homes. Wild Mountain Recreation Area, a prominent regional recreation destination, also is located in Amador Township. The US Census showed the population of Amador at 885 residents in 2010 and the State Demographic Office estimated their population at 893 in 2016.

Chisago Lake Township

The Town of Chisago Lake was first organized in July 1855 and included all of Township 33 and Township 34 of Range 20W and Township 33 and Township 34 of Range 21W. It was re-established with slightly different boundaries by an act of the Minnesota Territorial Legislature in 1858– the same year that Minnesota became a state. Originally, the township included three settlements. Those villages later incorporated, separated from the township, and become the municipalities of Center City, Chisago City and Lindström. Most of the history of the township is found in the history of these three cities.

The township is named for the Big Lake which it surrounds; thus the Chisago Lake (NOT Lakes) name. The Big Lake has since been divided into five smaller lakes as a result of railroad and highway infrastructure – North and South Center, North and South Lindstrom and Chisago Lake.

The town is governed by a Board of three Supervisors who are elected on a rotating year basis. The election is held in March usually just before the Annual Town meeting. The Board meets monthly. The first Board of Supervisors was Ephriam Ingalls, Frank Mobeck and Daniel Lindstrom and they were elected to office in 1858.

The US Census in 2010 counted 4,656 residents and the state estimated the population at 4,650 in 2016. Ki-Chi-Saga County Park and Moody Lake Park are located in the township as is the oldest cemetery in the Chisago County – Glader.

Fish Lake Township

Fish Lake Township is named for its lake and the outflowing creek. The township was organized three years after the end of the Civil War in 1868, the same year Fish Lake separated from Sunrise Township. The township of Fish Lake contains a small unincorporated village of Stark, named after Lars Johan Stark, the postmaster that served from 1867 to 1875.

In 2010, the US Census counted 2,012 persons in Fish Lake Township and the State estimated the population at 2,016 persons in 2016.

Franconia Township

Franconia Village was organized and platted in 1858 but not incorporated until 1887. The village was dissolved by the Legislature in 1897. Franconia Township was settled and named by Ansel Smith in 1852. Today Franconia Township contains regional and international destination attractions such as the Franconia Sculpture Garden and the world-renowned Hazelden Betty Ford substance abuse and addiction treatment center in the extreme northwest edge of the township. Franconia today is home to mostly commuters and small farmers.

The US Census reported 1,805 persons in Franconia Township in 2010 and the State Demographic Office estimated their 2016 population at 1,819 persons.

Lent Township

The Township of Lent was originally a part of Wyoming Township until it was separated by action of Chisago County in 1870. However, representatives of the new town continued to meet with Wyoming until an organizational meeting in March 1882. An important portion of the Carlos Avery Wildlife Management Area (the northeast part with sections of the main channel of the Sunrise River) is located within Lent Township. The township is home to small businesses and people who commute to employment in the Twin Cities. On January 16, 2007, Lent Township exercised their Town Powers rights and responsibilities (as allowed by Minnesota Statutes 394.33) by taking over the writing and implementation of their Comprehensive Plan and Zoning Ordinance. This also is the date of the townships most-recent Comprehensive Plan.

In 2010, the US Census reported 3,091 persons in Lent Township and by 2016 the State of Minnesota estimated the township population at 3,065 persons.

Nessel Township

Nessel Township was named after its earliest pioneer Robert Nessel. The township was separated from Rushseba and organized in 1871. The township contains Rush Lake and the small unincorporated area on Rush Point. The US Census counted 1,951 persons in Nessel Township in 2010 and the State of Minnesota estimated their population at 1,937 in 2016.

Rushseba Township

Rushseba is named for the Rush River and Rush Lake and after the Ojibwa name "seba" or "sippi" meaning river. The Township was organized in 1858. The St. Croix River forms the eastern boundary of the township. In 2010, the US Census reported 804 persons in Rusheba Township and in 2016 the State of Minnesota estimated the population at 792 people.

Shafer Township

Organized first as Taylors Falls the name was changed to Shafer in 1873. The biggest spur to growth in the township's history was the arrival of the railroad in 1881. The Almelund Threshing Show grounds are located in Shafer Township. It is an annual festival that recreates scenes from early farm harvest days. The US Census counted 1,048 people in Shafer Township in 2010 and by 2016 the State of Minnesota estimated their population at 1,048 people.

Sunrise Township

The Township of Sunrise contains the Sunrise River and the unincorporated village of Sunrise. The township was organized on October 26, 1858 and was much larger than it is now due to the fact that the original contained what is now the City of Harris, old Branch Township and the present township of Fish Lake. Wild River State Park follows the St. Croix River across Sunrise Township. The township remains home to residences and small farms. For 2010, the US Census reported 1,994 residents in Sunrise Township and the State of Minnesota estimated their population at 2,016 persons in 2016.

Wyoming Township

After annexation and consolidation actions in 2005, the land area of Wyoming Township was incorporated into the Cities of Wyoming, Chisago City and Stacy thus disbanding the township.

CHISAGO COUNTY POPULATION INFORMATION

	2000	2010	2016
Chisago County	41,101	53,887	54,766
Amador Township	744	885	893
Chisago Lake Township	3,276	4,656	4,650
Fish Lake Township	1,723	2,012	2,016
Franconia Township	1,128	1,805	1,819
Lent Township	1,992	3,091	3,065
Nessel Township	1,765	1,951	1,937
Rusheba Township	769	804	792
Shafer Township	646	1,048	1,048
Sunrise Township	1,594	1,994	2,016
Wyoming Township	4,379		
Township Total	17,713	18,246	18,236

Sources: Years 2000 and 2010 – US Census; 2016 – Minnesota State Demographers Estimate

Intergovernmental Coordination Goals & Policies

Goal: Coordinate efforts between the County, municipalities, townships, State and Federal agencies to assure wise land use, effective and efficient infrastructure, appropriate economic development and the protection of natural resources.

Policies:

1. Chisago County will work with townships and municipalities to encourage them to work together to construct urban growth areas and orderly annexation agreements.
2. The County encourages all municipalities to coordinate with bordering Towns and communities in following and implementing the provisions of Minnesota Statute 462.358, Subd. 1A. Authority., about subdivision planning to unincorporated territory within two miles of its limits. This study and planning would be to protect and promote the public health, safety and general welfare and to help plan for the orderly extension of utilities and roads to the rural areas around a municipality.
3. Chisago County will research the opportunity to expand the Transfer of Development Rights program to make it a multi-jurisdictional, county-wide program.
4. Chisago County will coordinate joint meetings with city and township officials on land use and other planning issues.
5. Chisago County will continue the open planning process by soliciting input from townships, cities, special districts, surrounding counties and state agencies (when pertinent) on land use applications, ordinances and other planning and zoning matters. The County Planning Commission will recognize the comments of the township when considering land use requests.
6. Chisago County will encourage cities and townships exercising their land use planning or Town Powers rights and responsibilities to maintain and keep current their Comprehensive Plans and land use regulations. Best practices for Comprehensive Plans is for the jurisdiction to review and update them as needed – usually every 5- 10 years.

Goal: Chisago County will coordinate planning efforts between their own departments to ensure efficiency of resources and delivery of government services.

Policies:

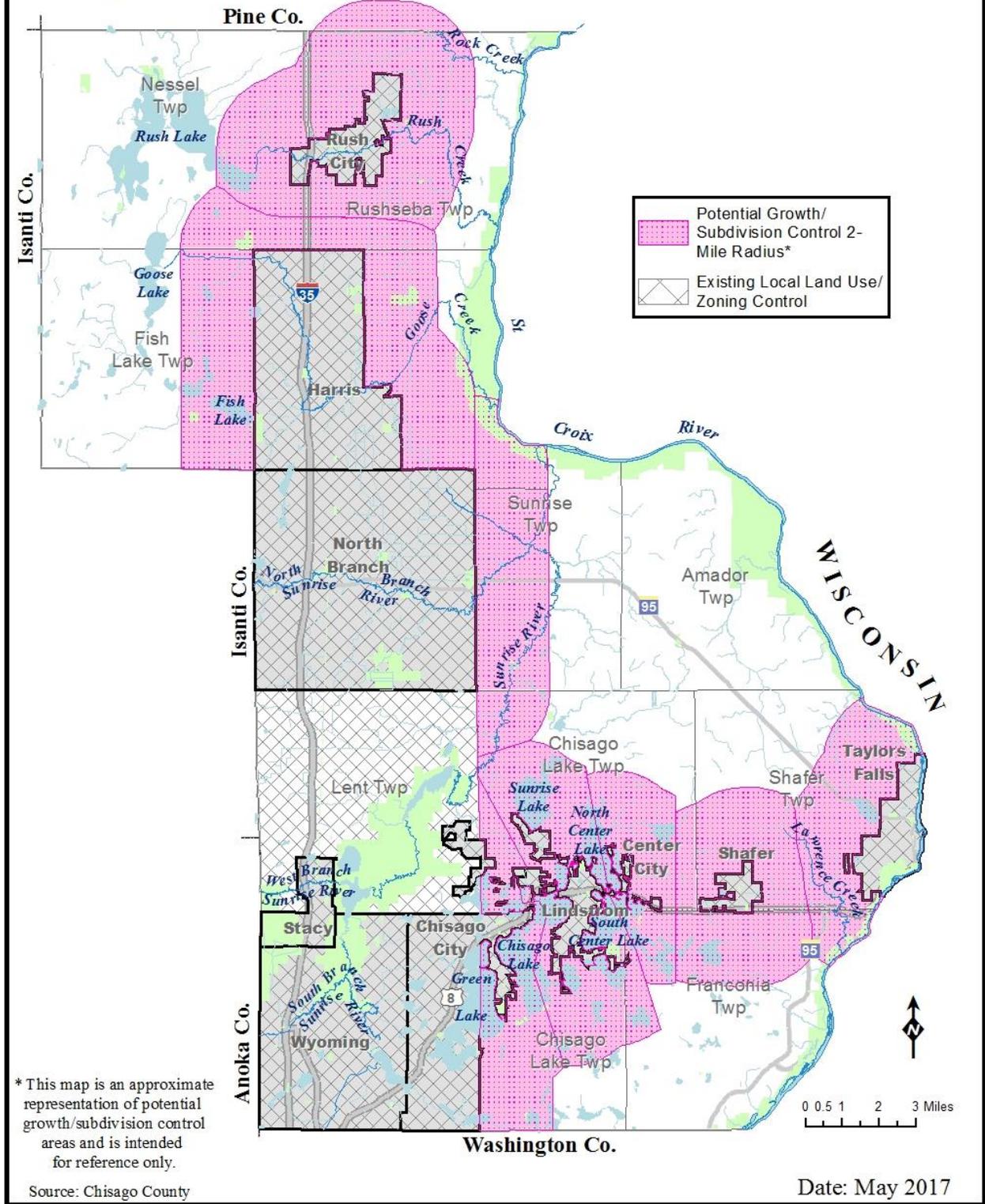
1. The County will use the Comprehensive Plan to link together the various plans of each County department into an overall coordinated system.
2. The County will encourage each department to coordinate resources and services to provide the most efficient, planned and cost-effective delivery of government services.

Goal: Chisago County is committed to continuing a public participation process in planning activities by communicating with its residents and by creating the necessary climate to secure increased input from county residents.

Policies:

1. Chisago County will strive for increased resident notification and input on policy issues.
2. Chisago County will develop an outreach strategy to inform citizens of land use educational opportunities.
3. Chisago County will conduct periodic public information meetings and strive to use the internet, electronic media and social media to update county citizens on county projects and developments.
4. Chisago County will use various forms of media to educate the public regarding land use issues and all planning efforts, such as newspapers, newsletters, direct mailings, social media and the County Website.

Chisago County Potential Growth/Subdivision Control Areas



* This map is an approximate representation of potential growth/subdivision control areas and is intended for reference only.

LAND USE/GROWTH MANAGEMENT ELEMENT

September 2017



**Chisago County Comprehensive Plan
2017**

Land Use

Introduction

The existing land use and land use trends are important factors in developing policies and preparing a future land use plan for Chisago County. Land use is a major factor as it determines the physical and economic characteristics of the County as well as determining the level of public services that agencies need to provide.

The Chisago County Land Use Plan describes how the County will guide growth in the unincorporated areas. The Land Use Plan is an official document, adopted by the Chisago County Board. It sets the broad policy that guides decisions about the physical development of the County. The Land Use Plan is the legal basis for land use controls.

The Land Use Plan is general and long-term while the zoning ordinance and zoning map are short-range and precise. The Land Use Plan sets the general guidelines and policies for reviewing and evaluating development proposals, the zoning map and ordinances are tools to implement the general guidelines and policies. The Land Use Plan delineates the general land use areas by type. The Zoning Ordinance and map define the zoning districts; special management overlay districts, the permitted, conditional and interim uses and requirements for each use within specific land use zones.

The Land Use Plan provides for logical development patterns that preserve the existing natural resources, respects the existing character of the county and provide a high quality of life. The planned development attempts to meet current needs without placing environmental, economic and social burdens on future generations to meet their needs.

Chisago County administers several ordinances that control land use and protect the unique and varied natural resources of the county. All County ordinances are enforceable only in the unincorporated areas. Cities are responsible for establishing and enforcing ordinances within their boundaries. Townships may adopt ordinances that are as restrictive as or more restrictive than County regulations.

The overall vision of the Chisago County Land Use Plan is to accommodate the county's projected population growth of 13,778 people (an increase of about 25 percent to a total of 68,071 residents) by 2030 while incorporating sustainable growth and preserving the natural, cultural and historic characteristics of the County.

Existing Conditions

Chisago County's diverse land use patterns include historic towns and villages, rural fringes, exurban residential communities and growing suburban-style cities. These areas are interspersed with rivers, natural areas, wetlands, lakes, bluffs and agricultural areas. The variety of developed and open space areas provides a mixture of visual landscapes unique to Chisago County.

A majority of land in Chisago County remains largely undeveloped, primarily in agricultural use, woodlands or wetlands. However, from 1990 – 2007, development occurred at a rapid rate. More recently, development slowed during the recession of 2008 – 2012 and but the rate of new development increased in the years 2013 – 2016. The majority of development has occurred in the southwest area of the County and along I-35 on the western side of the County and the Northern Lakes Area.

The lakes area around Wyoming, Lindstrom, Chisago City and Center City has attracted significant residential development over the past 20-30 years. This part of the County continues to be an area of growth, given proximity to employment centers in the eastern Twin Cities Metropolitan Area. Development also continues to occur along I-35, north to the County border.

Commercial development is found primarily within incorporated cities in the County. Unincorporated centers, such as Almelund, Rush Point, Sunrise and Stark also have a limited amount of commercial uses. Increased interest in commercial sites has occurred over the past several years along Interstate 35 and along Highway 8, primarily in Wyoming, Chisago City and Center City.

In total, there are 283,422 acres in Chisago County. Chisago County includes 68,555 acres of protected lakes, waters and wetlands (24% of the total county area). There are 91 lakes in Chisago County. In addition, there are 70,272 acres in incorporated cities (24.8%) and 213,150 acres in townships (75.2%).

State-owned land accounts for a significant portion of land (16,825 acres – about 6 percent of the County) in the County. Carlos Avery Wildlife Management Area consists of about 8,740 acres, Wild River State Park 7,000 acres, Interstate State Park 295 acres, Chengwatana State Forest 250 acres and Janet Johnson Wildlife Management Area (WMA) with 540 acres.

Factors Influencing Land Use

The land use situation in the county has not been static but has been constantly changing, both quantitatively and qualitatively. Over time, a multitude of factors have shaped and changed land characteristics, affecting and altering policies and decisions. The present situation has been influenced by characteristics of population, culture, geographical location, natural resource base and many other factors. A brief review of some of the major influences is presented here to summarize their relationship to land use.

1. Geographical Location

The county is located in the glaciated east-central area of Minnesota, bounded on the east by the St. Croix River. The river was a major transportation route at the time of original settlement because it was navigable by steamboat to Taylors Falls. The county lies roughly one-hour drive from the center of the Twin Cities on Interstate 35, which also is the route to Duluth.

2. Cultural Influences

The original settlers of Chisago County came from predominately an agricultural background. Subsistence agriculture on homesteads set the pattern for farm size, which has altered little in later years despite influences such as increased land prices, types of crops grown, and combining of smaller farms into larger landholdings or breaking up of large farms through inheritance or sale.

3. Population Characteristics

The population of the county was relatively stable until the last 20 years when it showed a rather marked increase and a continuing increase in population is expected. With more people coming into the county there has been a corresponding increase of demand on agricultural and open lands for urban and residential uses.

4. Natural Resource Base

The soil quality of Chisago County ranges from very good to unsuitable for agriculture and/or development. Originally, much of the land was covered by forest or oak savannah. There are several areas of poorly drained or steeply sloping land that owners cannot use for agriculture or residential development. The county has little mineral wealth, but has adequate supplies of water resources, that attracted both early settlers and more recently, new residents.

5. Residential Development Patterns

The major development corridors in the county are located around the northern lakes (Rush Lake, Goose Lake, Fish Lake and Horseshoe Lake), adjacent to Interstate 35, in the southern lakes area and along Highway 8. In addition, new home construction is distributed throughout the county.

Some factors affecting land use in the county in the past that are still affecting land use in the county today include:

1. Population Increase

Perhaps the single most important factor affecting land use in Chisago County today and in the near future is the growing population. In-migration of new families has created a demand for more residential areas and support services, leading to conversion of agricultural and open space lands to suburban and urban uses. By 2030, the State is estimating the County population will grow another 25 percent to 68,071 residents.

2. Transportation System

Interstate 35, in conjunction with the remaining highway network within the county, has increased the accessibility of county residents and businesses to the Twin City

Metropolitan Area. People now find it quite feasible to commute to a job in the Twin Cities and still reside in a relatively uncrowded ex-urban/rural environment.

4. Zoning Laws

Past and present zoning laws have had the goal of protecting agricultural lands from urbanization. Scattered small acreages have been developed for residential use.

5. Recreational Demand

Chisago County has the potential for providing recreational uses of the land and on the waters; uses which have increased in importance in recent years. The Wild River State Park and Interstate State Park have become important influences on the area as a major recreational area. There are several important water resources in the County: The St. Croix River, the Sunrise River, the Chisago Lakes in the southern part of the county and lakes in the northwest part of the county including Rush Lake that are all important recreation amenities.

Land Use Regulations

Chisago County provides for the orderly growth and renewal of the county by regulating land uses in the unincorporated areas. Chisago County administers several ordinances that regulate land uses and development. All ordinances are enforceable only in the unincorporated areas of the County. Cities and Lent Township are responsible for establishing and enforcing their own ordinances and implementing their own comprehensive and land use plans.

The following is a summary of the Chisago Land Use Codes and Ordinances:

Zoning Ordinance

The County's zoning ordinance protects the health, safety and welfare of residents and allows wise use of the land, while protecting and conserving its natural resources, its ecological systems and its economic stability.

Subdivision Ordinance

The subdivision ordinance establishes procedures and standards for the division of land in the townships in which the County administers plat and land split review.

Shoreland Ordinance

Through the shoreland ordinance (as mandated by the DNR), the County regulates the subdivision, use and development of shorelands of public waters in the county. These regulations are to preserve and enhance the quality of surface waters, conserve the economic and natural environmental values of the shorelands and provide for wise use of waters and related land resources.

Special Management Overlay Districts

Chisago County has several overlay zoning districts as part of the County zoning ordinance. These include the Upper St. Croix Overlay, Lower St. Croix Overlay, Sunrise River Overlay, Carlos Avery Overlay, Highway 8 Overlay and Sunrise Lake Overlay. It is the purpose of each of these overlay districts to identify extraordinary standards and requirements desirable for the protection of special or unique resources in Chisago County.

Floodplain Ordinance

Chisago County regulates flood hazard areas within the unincorporated areas that are subject to periodic inundation. The floodplain ordinance regulates new development as well as the extension, conversion or structural alteration of buildings in the floodway, flood fringe or general floodplain districts. These regulations prevent or limit building or expanding structures in floodplains in order to protect the public health, safety and general welfare and to conserve and enhance natural resources by preserving the capacity of floodplains to carry and discharge regional floods.

Subsurface Sewage Treatment System (SSTS) Ordinance

This ordinance regulates the design, installation, use and maintenance of community and subsurface sewage treatment systems. In addition, this ordinance helps provide for the orderly development of areas that do not have access to central public wastewater systems. Please see the Infrastructure Element for more details about this ordinance.

Land Use/Growth Management Goals & Policies

Overall Growth Management & Land Use Statements

Goal: Establish a comprehensive growth management strategy for Chisago County that promotes orderly and efficient growth of residential, commercial and industrial development while preserving the county's rural character.

Policies:

1. Recognize and respond proactively to internal and external growth pressures.
2. In the land use plan, select locations for types of uses based on transportation needs and availability and the best economic development potential, making these inter-supportive of each other.
3. Encourage an integrated approach to land use, transportation and natural resources, including development review for: a sufficient level of supportive services (i.e. schools, jails, emergency services, etc) and infrastructure, compatibility of land use and natural features, and economic viability of the land use.

4. Work towards minimizing conflicts between different and/or incompatible uses by establishing standards, such as, physical barriers, landscape screening and/or setbacks to provide buffers between districts/uses.
5. Define growth management in terms of “public service areas” where growth will be expected, allowed or limited due to the availability of services. These service areas are especially important in the two miles around cities where state law encourages extra-territorial planning of roads and subdivisions.
6. Recognize the importance of gateways to the community. Land uses along the corridor should be closely considered, as they will reflect upon the community’s image. (Hwy 8, Hwy 95, I-35 Interchanges).
7. Identify and preserve viewshed corridors along heavily traveled routes. Some options may include additional setbacks, and/or plantings in these areas.
8. Create a plan to restore or convert improperly used land by using incentives that will compensate for conversions. An example would be converting marginal land along a creek or ditch into a grass buffer strip to reduce run off into the surface water or using alternative reduction strategies for non-point source pollution such as rain gardens or vegetated swales.
9. Promote the proper management of natural and cultural resources for future generations.
10. Preserve the natural and open landscapes of the county’s unincorporated areas.

Goal: Recognize the challenges and compatibility of present and future land use and strive for the most harmonious balance.

Policies:

1. Coordinate plans and work with all local governments and agencies responsible for the regulation of land use.
2. Promote opportunities to communicate with the citizens of Chisago County concerning land development and resource management.
3. Develop an outreach strategy to inform citizens of land use related educational opportunities.
4. Encourage compatible land uses along bordering jurisdictions.
5. Where there is conflict between zoning district standards and the standards in special management overlay districts, the County seeks to have balance in the goals and standards between underlying zoning and management overlay districts.

Residential Development Statements

Goal: Plan for the orderly and efficient growth of residential development in the County.

Policies:

1. Encourage non-farm residential development to be clustered on small lots in and around unincorporated rural village centers, areas that are considered marginal for agricultural use and in locations with adequate road service.
2. Encourage density transfers and clustering techniques for non-farm rural residential development to preserve agriculture and environmentally sensitive areas.
3. Encourage higher residential densities and multiple family housing alternatives to be located in areas serviced by public sewer and water or in areas with community utility systems.
4. Provide a variety of rural housing opportunities, consistent with the natural amenities in the County and the protection of environmental systems.
5. Provide for the orderly development of safe and efficient housing opportunities in the County.
6. Preserve and/or enhance the character of established rural residential neighborhoods (homes on parcels 2 acres or larger with septic systems and wells) that are not planned for public sanitary sewer service. Use incentives for private property owners to preserve trees and maintain lower-density development to maintain rural character.
7. Encourage cluster developments to create appealing, low environmental impact rural neighborhoods.
8. Support compatible agricultural and rural residential development in the County.
9. Develop and adopt provisions in development ordinances that encourage innovative site and housing unit designs.
10. Maintain and encourage sustainable agriculture as a land use and a viable economic activity in the county.
11. Promote land uses throughout the county that encourage active and sustainable living.
12. Encourage land uses throughout the County that promote a full spectrum of life-cycle housing types for all incomes, ages and races.
13. Rural residents and developments can reasonably expect agricultural, forestry and mining activities within the vicinity of their homes. The County should add Right to Farm language in its ordinances and develop a handbook of what newcomers might expect in the rural areas of Chisago County.
14. Encourage cities in the County to carefully study and plan for their possible expansion and future development within 2 miles of their boundaries as allowed by State Statute 462.358. The townships and property owners should recognize and consider protecting these areas from premature development or subdivision in coordination with or at the request of the nearby cities.

Commercial/Industrial Development Statements

Goal: *Plan for the orderly, efficient growth of commercial and industrial development in the County.*

Policies:

1. Encourage new commercial and industrial development that requires public sewer and water to locate within the county's cities in accordance with their Comprehensive Plans.
2. Encourage limited commercial developments that do not need public sewer and water to locate in areas with adequate road service within rural village centers.
3. Promote commercial and industrial development in planned clusters such as business parks and mixed-use developments where adequate public infrastructure is available.
4. Allow for home occupations, rural retail tourism and limited rural businesses on homesteads in agricultural areas as well as small, community-based retail in the county's unincorporated rural village centers.
5. Clearly define and regulate or limit the type of commercial and industrial uses that can be operated under the definition of a farm/agricultural use.
6. Indicate in the land use plan and zoning ordinance areas designated for commercial and industrial development, such as locations adjacent to I-35 and other areas near primary transportation routes that provide the best use of the land and where there is adequate infrastructure in place.
7. Consider the I-35 corridor as a location for commercial/industrial land uses.
8. Strive to provide land for commercial development to meet a standard of 5% to 6% (14,000 – 17,000 acres) of the total developed land in the county. Future locations for commercial development will primarily be based on the transportation system.
9. Support land use patterns that efficiently connect housing, jobs, transportation and retail and commercial centers.
10. Establish performance standards for commercial and industrial development that promotes quality new development site design.
11. Allow for commercial and industrial districts where public services are available and where land use conflicts between commercial/industrial and residential uses will not impede commercial and industrial growth.
12. Commercial recreation, home occupations and rural retail tourism opportunities should be allowed in the Agricultural district as long as performance standards are established and met.

Growth Management Strategy

Descriptions, Purposes and Intent

Rural Village Center

- Rural centers (unincorporated areas) that have been historically formed shall be encouraged to add new housing units and businesses, if such growth is consistent with their historic character; is located as a contiguous extension of the existing village center; and can be feasibly supported by on-site or feasible community provided public infrastructure and services.
- New homes will be supported provided on-site sanitary sewer and water standards are met. Under a conditional use process, smaller lot sizes may be allowed if clustered/community septic and wells are used. Desirable design criteria shall be determined based upon a review of the community's pattern of houses, lots, streets, major building views, open spaces, trees and hills.
- These centers are intended to be areas of multiple uses to serve the local public that have a historic basis for their existence. These areas are defined as Almelund, Stark, Rush Point, Sunrise, Palmdale and the I-35/County Road 17 Center in Lent Township.
- The village centers are planned to evolve as a small, self-contained town center and as an alternative to urban sprawl.

Rural Transit Center

- Provide appropriate and centralized support facilities and retail and service businesses adjacent to Interstate 35/County Road 17 interchange.
- Permitted uses include uses such as single family dwellings, public parking and transit facilities, local government administration and service buildings, agriculture uses, farm drainage systems, flood control and watershed structures and erosion control devices, temporary or seasonal stands for sale of agricultural products, greenhouses or nurseries, forestry and sod farming, wildlife areas, forest preserves, public parks and other open space uses and daycare centers.

Rural Residential Areas

- Such areas are to accommodate and acknowledge existing residential development and those areas that are located outside of any identified growth or expansion area of a municipality. Examples of such areas include existing

residential development near the Chisago, Rush and Goose chain-of-lakes, Almelund and Sunrise.

- Land that is suitable for residential but not commercial/industrial uses.
- The long-term predominant use of these areas is intended to be large-lot, low-density residential development. However, long or short-term temporary uses may include crop production, animal husbandry not involving new feedlots, forest management, other agricultural uses and sand and gravel operations within the vicinity of residences.

Commercial/Limited Industrial Area

- Areas where there are legally existing commercial and/or industrial uses already in place.
- Minimum lot size dependent on use and area needed for water and on-site sewage treatment system.
- New development or redevelopment in this area must provide buffer from residentially zoned land and existing residential development.
- All new commercial/industrial development sites must be served by adequate transportation infrastructure including roads, highways or railroad facilities.

Agricultural and Resource Protection Areas

- These are areas in Chisago County outside of highly developed areas that will remain more rural in nature.
- Includes areas intended for exclusive resource related use: areas intended primarily for agriculture and other resource uses, with limited rural residential development; recreational commercial and other resource related business uses; rural retail tourism uses; natural resource areas protected by easement or acquisition or limited due to site constraints; and areas which will accommodate a very limited amount of subdivision activity.
- Both traditional agriculture and larger hobby farms will be encouraged. Some residential development in this area will be allowed but it will be limited to a base density of 1 per 5 acres. Clustering will be encouraged, preserving most of the land area in larger parcels (20+acres) for agriculture, hobby farms, or open space.
- Base density will not necessarily mean the minimum lot size. Building eligibilities deriving from base density may be transferred from contiguous parcels under

common ownership. Density transferred may not be used more than once for any piece of land.

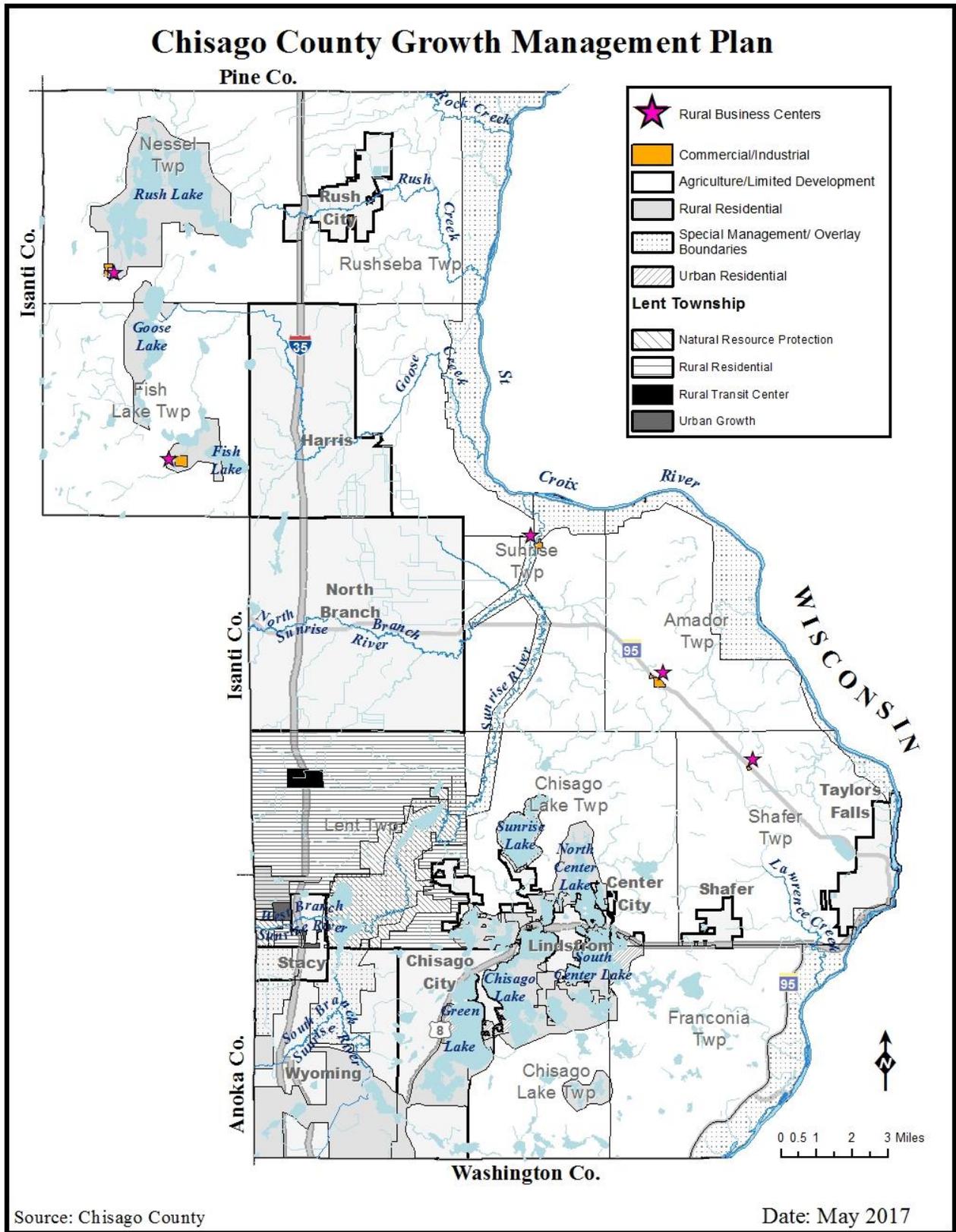
- Any clustered subdivisions will require approval of a conditional use permit. The conditional use process will consider whether the development is sited and designed in a manner to protect rural view sheds and to have minimal impact to adjacent agricultural uses, forestland, special or unique natural resources or other natural resources. Conditions should be attached to minimize impact to surrounding land uses, natural resources, historical resources, natural corridors and the environment. Such conditions may consist of landscaping criteria, buffering and minimizing visual intrusion caused by the new development.
- Anyone building in this District should accept and understand the rural environment as it is found. Anyone building or living in this district also should be aware that residential development is not the primary or sole purpose of this district. Chisago County intends and allows a wide-variety of land uses and activities in this District including farming and livestock operations, rural retail tourism, animal kennels, renewable energy resources and commercial recreation. The County does not consider farm or agricultural activities public nuisances provided those activities do not violate any State statute or rule or any other laws or ordinances.
- Allow other uses – essential services/public services, large scale land uses requiring a location in a unique rural land area and small-scale home occupations.

The map on page 9-14 depicts the Growth Management Plan for Chisago County and the map on page 9-15 shows the possible local city extraterritorial subdivision/land use protection areas.

Growth Management Strategy

District	Description	Base Density	Minimum Lot Size	Clustering	Transfer of Development Credits	Receiving or Sending Area
Rural Village Center	Historic unincorporated area and/or transit centers. Mixed use corresponding to historic nature of community. Growth is encouraged in these areas.	2 acres with incentives or density increases for clustering	To be determined by historic nature of community and wastewater needs being met	Allowed and greatly encouraged with incentives	Allowed and greatly encouraged with incentives	Receiving
Commercial/Limited Industrial	Includes some existing commercial areas and some areas that may be reserved for future commercial uses.	Dependent on use and area needed for water and wastewater needs	Dependent on use and area needed for water and wastewater needs	N/A	Allowed	Receiving
Rural Residential	Accommodates existing residential areas as well as other areas in townships that is planned for large lot, low density residential development.	2 acres platted	2 Acres or less if clustering used to increase density	Allowed and greatly encouraged with incentives	Allowed and greatly encouraged with incentives	Receiving
Ag. and Resource Protection	Areas outside rural residential areas and other more highly developed areas that will remain more rural in nature. Areas intended to be primarily agriculture and other resource use with limited residential development.	1 per 5 acres platted	5 acres platted unless cluster option used or 20 acres by metes and bounds split	Allowed but no direct density increase, other incentives provided for clustering (consider adding density increase incentives for clustering)	Allowed and greatly encouraged with incentives	Sending (and adding Ag areas as receiving)
Rural Transit Center	Provide appropriate and centralized support facilities and retail and service businesses adjacent to Interstate 35/County Road 17 interchange	Dependent on use and area needed for water and wastewater needs	Dependent on use and area needed for water and wastewater needs	Allowed and greatly encourage with incentives	Allowed and greatly encouraged with incentives	N/A

Chisago County Growth Management Plan



IMPLEMENTATION

September 2017



Chisago County Comprehensive Plan 2017

Introduction

In many ways, formal adoption of the Comprehensive Plan is the first step in the planning process, rather than the last, because it establishes policy directions for the county, describing its objectives and methods to achieve them. The challenge often comes in translating a Comprehensive Plan's vision, goals and policies into the day-to-day operations and actions of the government. Each chapter or element of this Plan has goals and policies for each element of the Comprehensive Plan. Without continuing action to implement and update the Plan, County efforts will have little lasting impact. In other words, effective implementation is the difference between having a good plan on paper and having a great County on the ground.

The County should not forget the important ideas it has included in the Comprehensive Plan. The Plan is a vision for the County's future. It is the collective will and dreams of its citizens. It is the duty of the County to find ways to give the Comprehensive Plan life that will keep it true to the vision and to maintain its integrity.

This section of the Comprehensive Plan focuses on the actions and initiatives Chisago County should undertake to implement the Land Use Plan and the related elements of the Comprehensive Plan. These are the steps the County should take to put into action this Plan. The emphasis is on the relationship between the County's land use and environmental regulations and the policies and land use categories of the Plan. The County's Environmental Services Department administers these regulations and they have the primary responsibility for proposing the necessary changes and implementing the recommendations in this Element.

Implementation Tools

The following provides a general overview of some of the specific tools available to county governments when they implement comprehensive plans. Some or all of these tools may be applicable for Chisago County.

Primary Tools

Capital Improvement Program (CIP)

Capital improvement programming is a financial planning process used by local governments to prioritize their investments in public infrastructure. The infrastructure includes items such as highways and streets, water and sewer facilities, parks, trails and public buildings. Typically, agencies develop capital improvement programs every one or two years and list out potential projects and costs over a five-year period. Recommended projects developed in a comprehensive plan should be incorporated into the County's CIP. Thus, the CIP process represents a primary means of identifying projects and resources the County needs to implement strategic elements of the Comprehensive Plan.

Official Mapping

Minnesota State Statutes authorizes local governments the ability to adopt official maps after the adoption of transportation and public facilities plan. An official map is a map that

shows areas in the community where the County has determined there is a need for land for future streets or road widening, parks and other public facilities.

The primary purposes of official mapping is to:

- 1) Communicate with property owners, developers, and citizens where these lands are located and;
- 2) Prevent or forestall the construction of buildings or other private improvements on the designated lands.

The official mapping is designed to save the public expense of paying for buildings and improvements in such designated corridors.

To adopt an official map, the County must work through the process established in the state law. This includes a review of the map by the Planning Commission and a public hearing held by the County Board. Property owners and citizens alike should be a part of the official mapping process.

Subdivision and Zoning Controls

One of the primary methods of implementing the goals and policies of the Comprehensive Plan is through the County's land use and development regulation. Minnesota Statutes state that zoning changes should be consistent with the Comprehensive Plan. While zoning has received the most emphasis in the past as a means to implement Comprehensive Plans, subdivision regulations are just as important of a tool. Subdivision regulations are intended to guide the platting and development of land and ensure that adequate public facilities are constructed or provided with the development. Subdivision regulations prescribe standards for site design, lot and block design, street and utility improvements (including extensions), rights-of-way (for roads and trails) and easements, etc. In summary, subdivision regulations ensure that the costs of public improvements as created by a proposed development are borne by the developer and subsequent landowners rather than by the County or City.

Local jurisdictions design, enact and use Zoning Ordinances to control land uses. They consist of a zoning map and supporting ordinance text. The zoning map divides the community into zoning districts and the text describes regulations for the use of land within those districts. Zoning regulations typically include a list of the uses that are permitted, conditional and/or interim, lot sizes, setbacks, density standards, etc. They also can include design controls on the maintenance and upkeep of property. As required by State law and as is stated in the purpose section of the Zoning Ordinance, the County enacts all standards and requirements in the Zoning Ordinance to protect the health, safety and welfare of residents and property owners.

Review and Revision

Comprehensive planning is a continuous process and thus the County should monitor and update the Plan when necessary. The Planning Commission and the County Board should carefully review proposed changes to the Plan and their implications and actively seek citizen comment on such proposals. If the County finds that changes to the Comprehensive Plan are appropriate, the County should formally add them to the Plan by

legal amendment. In addition, the County should seek to review the entire Comprehensive Plan every five years and make changes where necessary to ensure that it is an up-to-date expression of the goals, policies and intentions of Chisago County. In addition, periodic or annual reviews of Plan elements or chapters is a good exercise for staff and the Planning Commission.

Implementation Steps

The updates to the Comprehensive Plan and the County development regulations require the County Board and the County staff to consider how to coordinate the work programs. One way to frame this dialogue is to propose an annual work plan, conduct a budget analysis and a review of the County CIP with the prioritization of needed Plan elements. In addition, a review of potential partners and potential public engagement and interest in County projects and activities would be helpful.

Upon adoption of the 2017 revision of the Comprehensive Plan, County Staff will set about reviewing and recommending changes to the County's regulations to help meet the goals and policies in the Plan. A sampling of the Documents the County should revise and update include:

- Zoning Ordinance
- Subdivision Ordinance
- Shoreland Management Ordinance
- County Right-of-Way Ordinance
- Transfer-of-Development Rights (TDR) Ordinance

In addition, Staff may be drafting new ordinances and/or amendments for consideration by the Planning Commission and County Board, as unforeseen but emerging land use, planning or subdivision issues or needs arise. Priority projects identified through a work plan and as directed by the County Board may require adjustment to commence work on emerging trends such as those listed below or those yet to be identified. County staff expects a work plan to include studies of or updates to the:

- Rural Retail Tourism Ordinance
- Commercial Recreation Ordinance
- Agricultural Protection
- Zoning and Plan Consistency
- Protection of future transportation corridors
- Housing Mix
- Cluster Development
- Natural Resource Protection
- Park and Recreation Area Protection